COMBAT AIRCRAFT 136

Peter de Jong

ARADO Ar 196 UNITS IN COMBAT

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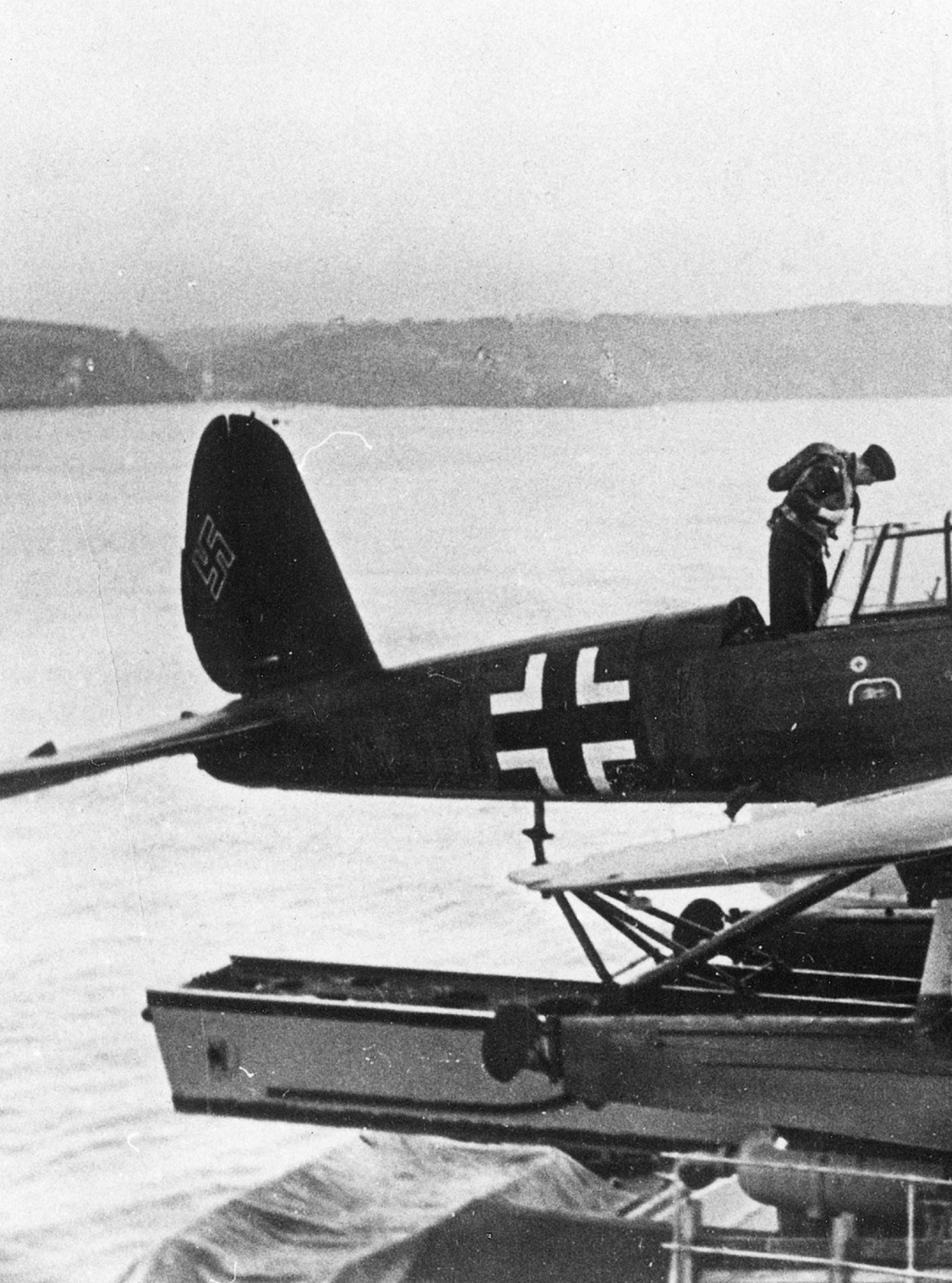

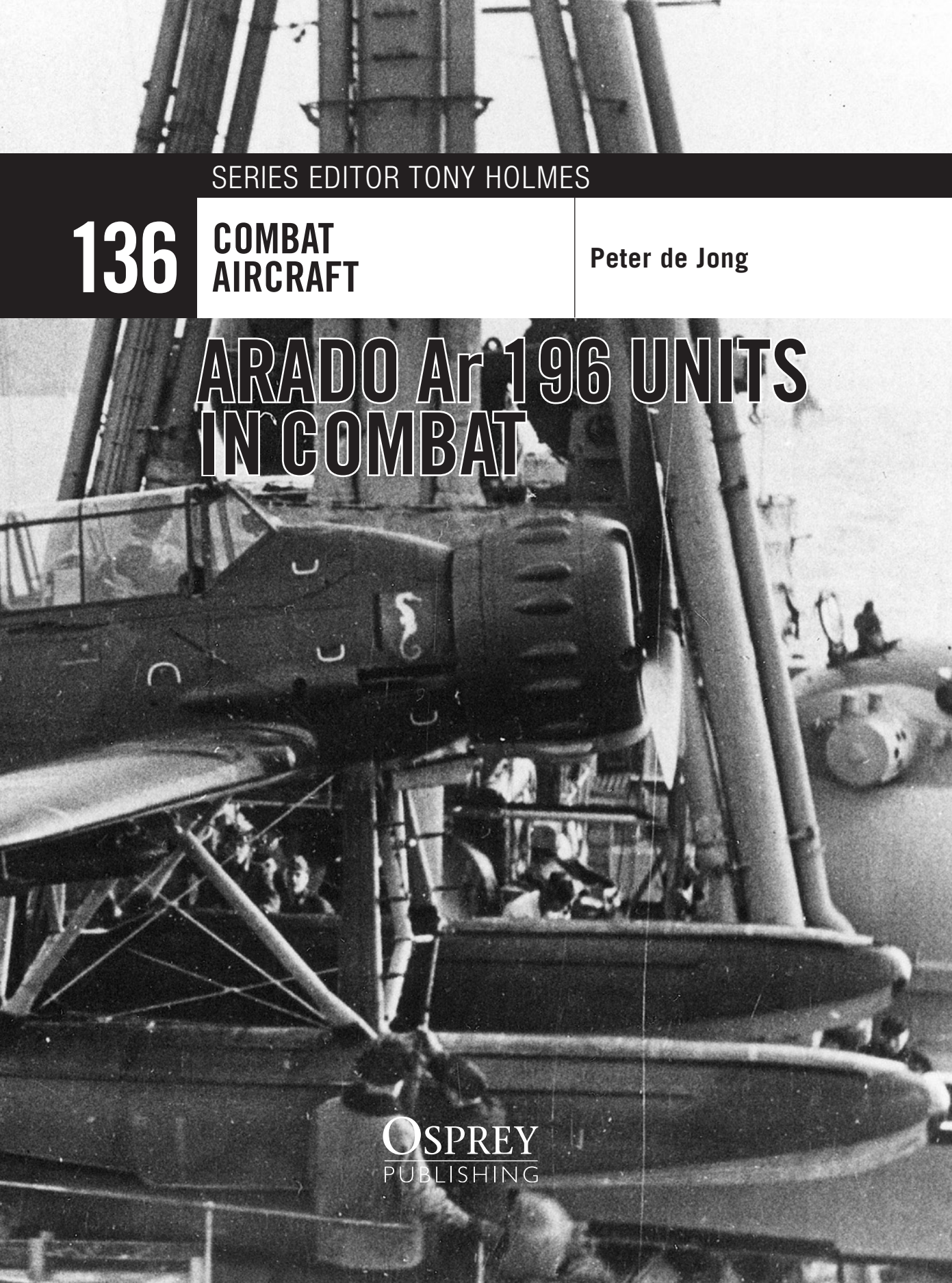

SERIES EDITOR TONY HOLMES

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OSPREY PUBLISHING

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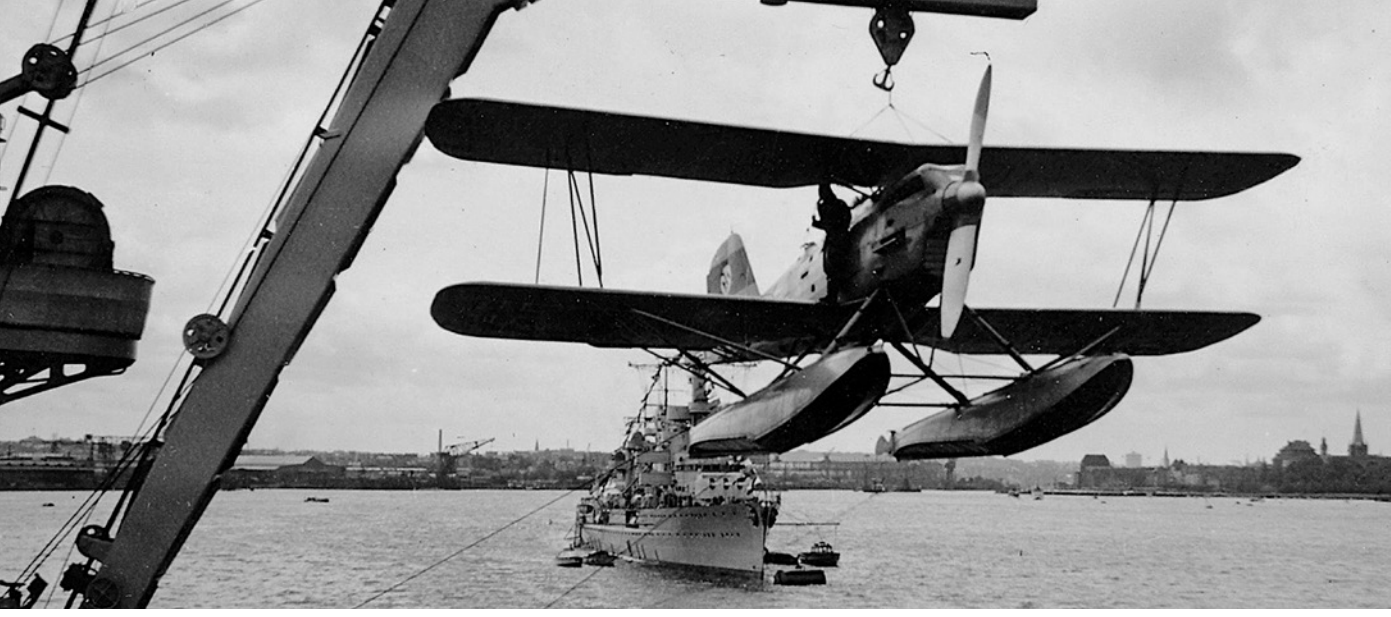


The He 60 was robust and seaworthy, but limited by its poor load-carrying capability. This example, photographed on 2 June 1936, is hanging from the crane of the light cruiser *Köln* (Cologne) whilst the vessel was anchored in the port of Kiel (*Horizonten*)

CHAPTER ONE

THE LAST FLOATPLANE

Big politics suddenly came to the friendly German North Sea island of Norderney in the early spring of 1935. On 9 March Generalleutnant Hermann Göring revealed the existence of the Luftwaffe to *Daily Mail* correspondent George Ward Price, and to the British and French air attachés in Berlin. Overnight, the old seaplane station on the island was again a military base, and on 27 March, the somewhat shady aviation company Severa GmbH became Coastal Reconnaissance Squadron (Multirole) 2./116. Men working there started wearing military uniforms, and painting black crosses on their Heinkel He 60 floatplanes.

The word 'Multirole' referred to their special new task – operating their He 60s from the bigger warships of the German navy, restyled as the Kriegsmarine (war navy, as opposed to merchant navy) that same month. To their surprise, the personnel found their *Staffel* in the Luftwaffe rather than the navy, the powerful Göring gobbling up all naval aviation and declaring 'everything that flies belongs to me'.

It was very much a case of serving two masters, however. Many of the aircrew remained naval personnel, especially the observers. As usual in Germany, the observer was also the aircraft commander, while the pilot, despite the ring of the word Flugzeugführer, was merely the 'driver'. Thus, a common combination was to find a young Luftwaffe NCO in the front cockpit, with a Kriegsmarine Leutnant zur See or Oberleutnant zur See in the back. The latter might also command the Luftwaffe detachment on

board a ship, which included a crew chief and two or three mechanics. Embarked aircraft were obviously controlled by the ship's captain, and in wartime, naval air units were to be placed under Kriegsmarine operational control.

In 1937, the Norderney unit was redesignated 1. *Staffel/Bordfliegergruppe* (BoFlGr) 196 (1st Squadron, Embarked Air Group 196), and transferred to the naval port of Wilhelmshaven. A sister *Staffel* was formed at Holtenau, near the navy's other main base in Kiel. This unit was numbered 5./BoFlGr 196 in accordance with an ambitious scheme to have an embarked air wing with three groups and 12 squadrons in the future.

The navy was being expanded, of course, in accordance with Nazi Germany's fresh major power stance. When the going got rough, though, Hitler had other priorities. No more large ships were launched after 1939, and, significantly, no aircraft carrier ever entered fleet service. Still, the Kriegsmarine took itself very seriously. Larger ships at least carried seaplanes, and as in other modern navies, they had catapults to launch these observation and reconnaissance assets instantly into the air when required, although their recovery always remained cumbersome.

The He 60 was, in a way, a suitable machine, having been designed for the shipborne role in 1930. A neat-looking two-seat biplane on twin floats, it possessed fine handling qualities on the water, and its mixed construction was very solid to allow it to withstand the rigours of catapulting and landings in rough seas. But it was unduly heavy. To say it was underpowered does no justice to its 660 hp BMW VI inline engine – rather, the airframe was overweight, giving poor performance and load capacity. In reality, all the He 60 could get up in the air was its observer, who would often remove his machine gun to save weight. Empty equipped weight for the He 60, at more than 2700 kg (5952 lbs), exceeded the gross weight of its counterpart in the US Navy, the Curtiss SOC Seagull, which did much the same job.

The Ar 95 lost out to the He 114, sending Arado's Walter Blume back to the drawing board (*Horizonten*)

Beautifully crafted, the He 114 sesquiplane was actually faster than the monoplane Ar 196. It had serious handling issues, however (*Horizonten*)

Obviously, there was room for improvement, and Göring's *Reichsluftfahrtministerium* (RLM – German Ministry of Aviation) duly issued a requirement for a new *Borderkunder* (on-board scout) in that historic month for the German military, March 1935. Development contracts were awarded for proposals submitted by Heinkel and Arado, the latter company almost neighbouring the original Heinkel works in Warnemünde, near Rostock, and being involved in He 60 production. Friedrichshafen seaplanes had already been built on a site at Breitling harbour in 1918, and in 1925 Arado (Spanish for 'plough') was established there, with military production as its covert purpose.

Arado's biplane *Borderkunder*, the Ar 95, and the Heinkel He 114 sesquiplane were traditional, largish reconnaissance aircraft on twin floats, both powered by a 900 hp BMW 132 radial engine in their definitive form. The RLM developed a preference for the He 114, and Arado was advised to rework the Ar 95 as a universal naval aircraft for export, with two or three seats and either floats or wheels, and as the Ar 195 torpedo-bomber for the planned German aircraft carriers. The Ar 95 did not fly until 3 December 1936, and only small numbers were built. Some of these served on the Eastern Front until 1944, so technically there was apparently little wrong with the first seaplane created by Dipl-Ing Walter Blume, Arado's chief engineer from the mid-1930s.

A World War 1 ace credited with 28 aerial victories, Blume was a remarkable and ambitious figure who would leave his mark on all subsequent Arado designs up to and including the Ar 234 Blitz jet bomber. He must have been unhappy either with the Ar 95 itself, with losing the design competition, or with its specifications, for during the course of 1936 he designed a smaller and lighter low-wing floatplane, still powered by the same BMW 132 engine. Possibly, he was influenced by catapult trials undertaken by Heinkel He 51W fighters on floats, which proved that faster aircraft could be launched from warships without too many accidents.

Blume submitted his new design on 12 August 1936. No less than 24 representatives of the RLM, the Travemünde seaplane test centre, the Luftwaffe and BMW came to Warnemünde to inspect a mock-up three weeks later. Apparently written around this, a fresh *Borderkunder* requirement was issued to the aircraft industry in October, calling for a light on-board scout with little equipment or armament and a take-off weight of only 2500 kg (5512 lbs). With an engine in the 800–900 hp bracket, this suggested a spirited performance, although no goals were given.

This was bad news for Heinkel, especially since all was not well with the He 114. First flown in the early summer of 1936, this elegant aircraft proved to be no kitten to tackle without gloves, having some adverse

characteristics both on the water and in the air. Heinkel did not give up on it, constructing no fewer than nine prototypes in an effort to iron out the worst problems. This seemed to pay off when He 114 production aircraft of 1./BoFlGr 196 embarked on board the new battleships *Gneisenau* and *Scharnhorst*. The He 114 had only entered service as a stopgap, however, and it even proved a failure at this. Indeed, the aircraft never replaced the old He 60 on other ships. Most of the 98 He 114s built were used by training units, or supplied to Spain, Sweden and Romania.

While Heinkel did not tender in the new competition, this did not mean that the coast was all clear for Walter Blume's monoplane design. Three other proposals reached the RLM's grand new offices in Wilhelmstrasse, although two of them were quickly dismissed. Gothaer Waggonfabrik seemed to have read only the word 'light' in the specification, offering a floatplane variant of the humble Go 145 trainer, while Dornier entered its three-seat Do 22 floatplane which was simply too large for shipboard use. Focke-Wulf came up with an all-new design, however. Its Fw 62 biplane and Blume's Ar 196 monoplane were selected for development.

TWO FLOATS, OR ONE

Four prototypes were ordered from each company – two with twin floats, and two with a central float and outrigger floats. The latter configuration was unusual in Germany, but was believed to offer advantages during landings in rough seas, as the heaviest blows would be absorbed by the fuselage, not through the wings. On the other hand, the small outrigger floats might dig into bigger waves, causing longer take-off runs, while twin floats would also be better for manoeuvring in the water.

The twin-float Ar 196 V1 prototype first flew on 1 June 1937 from the Plauer See, Arado's development department having moved to the company's new premises in Brandenburg an der Havel. The new seaplane was a good-looking low-wing monoplane, well adapted for shipboard use.

The first Ar 196 prototype, D-IEHK, takes off from the Warnow River near Arado's Warnemünde works, although it had been built at Brandenburg. It has a two-bladed propeller and a large spinner (*Horizonten*)

A conservative design, the Fw 62 did surprisingly well in the fly-off against the Ar 196. Like its competitor, the aircraft came in twin-float and central-float variants (*Horizonten*)

The wings could fold for stowage and, while the Ar 95 had a monocoque metal fuselage, the Ar 196 reverted to a steel-tube frame to facilitate small repairs at sea. This was clad largely with Hydronalium, a light, seawater-resistant aluminium-magnesium alloy, with old-fashioned fabric on the rear fuselage and control surfaces. The floats were also made of Hydronalium, and they doubled as fuel tanks in both the twin-float and central-float variants.

The aircraft was heavier than the ambitious target, and not as fast as one might have expected – it was slower, actually, than the He 114 sesquiplane. The Ar 196 V1 was quite agile though, and easy to fly. There were few issues, and the V1 was flown to the government seaplane test centre in Travemünde in September. It was followed quickly by the twin-float Ar 196 V2 and the central-float V3 and V4. The V3 successfully performed the type's first catapult launch on 19 February 1938.

The Fw 62 did not fly for the first time until 23 October 1937, and the mixed-construction biplane was clearly the runner-up in the competition. It did well, though, in a fly-off at Travemünde, and was found to have better handling both in the water and in the air. Still, the Ar 196 was declared the winner on the grounds of its monoplane construction, which was easier to manufacture and lighter, ensuring a better load capacity. Already the V4 prototype was flying with forward-firing armament, intended principally for use in an additional role for the Ar 196 as a shore-based coastal reconnaissance aircraft.

Victorious, Arado withdrew the V1 prototype from the test programme for some minor speed record attempts – only in the Ar 196's category though, and not the general seaplane world speed record, held by the Macchi MC.72 and then still standing as the *absolute* world speed record at 709 km/h (441 mph)! Months were spent fitting a more powerful BMW 132SA engine to the Ar 196 V1, installing a low-profile cockpit canopy and smoothening the airframe. Then the RLM became aware of the record attempt and forbade the venture on the grounds of military security.

Meanwhile, the selection of a floatplane configuration took longer than the selection of the Ar 196 itself. The efforts were joined by at least three

Ar 196B-01 D-INCN taxies over *Gneisenau*'s landing sail, or mat, off Travemünde. This device proved useless in rougher seas. Equipped with a central float, the Ar 196B was less stable during manoeuvring and, controversially, this was judged to outweigh its better landing performance (*Horizonten*)

Ar 196A-0 twin-float and three Ar 196B-0 central-float pre-production aircraft from November 1938. Early testing did not confirm the theoretical differences between the two set-ups – there seemed to be little to choose between them.

The calmer waters of the Baltic Sea off Travemünde were evidently not the best place, however, to put ocean-going equipment to the test. In the spring of 1939, trials were undertaken here with a so-called landing mat or sail towed alongside the new battleship *Gneisenau* to flatten the waves. Pilots were supposed to alight over the mat, uncomfortably close to the ship, and the aircraft were then reeled in to be hoisted back on board. The landing mat was adopted, only to be found useless on the high seas.

Meanwhile, a special Luftwaffe evaluation unit had been put in charge, and while its pilots may have been competent enough, 10. (See)/*Lehrgeschwader* (LG) 2 was a rather obscure outfit. The Ar 196's Atlantic testing took place, belatedly, as part of a major German fleet exercise held off Portugal and Morocco in April and May 1939. An Ar 196A-0, coded L2+X41, was embarked on board the 'pocket battleship' *Admiral Graf Spee* and a second Ar 196B-0 joined its sister ship *Admiral Scheer*.

Gneisenau did not take part in the exercise, leaving Kiel on 12 June 1939 for Atlantic trials of its own carrying two Ar 196s for continued oceanic testing. The ship visited Gran Canaria and Madeira, prior to returning to Germany on 26 July. Ten days later, LG 2 filed its report to the Travemünde test centre, stating that the Ar 196 generally met or exceeded its expectations. Regarding the two float configurations, the central float was finally found to be 'undoubtedly' better when landing in rough seas. However, its roll stability during manoeuvring on the water was so much worse that the twin-float aircraft was to be preferred. This verdict confirmed the provisional choice of the RLM, which had already ordered the Ar 196A into production.

While pilots liked the Ar 196, Kriegsmarine captains were far less complimentary, complaining that the Arado lacked both the ruggedness and seaworthiness of the old He 60. In 1941 the aircrew of the auxiliary cruiser *Orion*, which did not have a catapult, wrote a report comparing the aircraft to the Japanese Nakajima E8N biplane they had been operating for two months. On the plus side, the Arado in its definitive form was much better armed, and it had a much shorter take-off run. However, if the pilot attempted to take off with insufficient speed, this could be fatal as the aircraft would drop its left wing. The landing speed of the Ar 196 was too high, the report stressed, and on top of that the pilot's view during landing was poor. An uneven touchdown, with a wave top under one float, resulted in a strong tendency to overturn over the bow of the other float. The central-float set-up of the E8N was much better in the opinion of *Orion*'s aircrew.

The RLM did keep toying with the float arrangement. A modified central-float Ar 196 V5 prototype was built in 1940, and during 1941 the three older Ar 196B-0 airframes, which had been relegated to the seaplane advanced flying school in Pütnitz, underwent a brief operational re-evaluation with BoFlGr 196. They soon resumed their training duties, however.

The twin floats had been lengthened by 80 cm (2 ft 7 in) during the Ar 196's early testing, and a further stretch of the twin floats was planned for the Ar 196C – the prototype of this proposed series, the Ar 196 V6, was flown in September 1941, but the C-model did not enter production. Ultimately, the Ar 196A would be the only variant to see operational service.

This close-up of an Ar 196A-2/4 clearly shows its forward-firing armament – a 7.92 mm MG 167 machine gun on the starboard side of the nose and two wing-mounted 20 mm MG FF cannon, the latter protected here by seawater caps. Forward of the cockpit is a mounting plate for an ESK 2000B gun camera, which itself is not present. Outside the float struts is an electrically operated ETC 50 rack for a 50 kg bomb. The small dome below the centre fuselage contains a *Peil* D/F loop antenna. The line attached to the side of the cockpit allowed the aircraft to be grabbed and controlled with a boat hook during hoisting or on the water (*Horizonten*)

PRODUCTION

The first of 20 Ar 196A-1s was delivered to the Travemünde test centre on 20 July 1939. The only armament installed was a flexible 7.92 mm MG 15 machine gun for the observer, although, like the later versions, the A-1 could carry two 50 kg bombs on underwing racks for use principally against enemy submarines. The engine was an 880 hp BMW 132K turning a three-bladed wooden Schwarz propeller.

The Ar 196 V4 prototype had been wrecked when the engine mount collapsed during a rough landing, and this was belatedly recognised to be due to a structural weakness that was not fixed until the Ar 196A-2 entered production in November 1939. It introduced the much heavier armament first tested on the V4, namely a 7.92 mm MG 17 machine gun on the right side of the nose and two wing-mounted 20 mm MG FF cannon. The BMW 132K engine was uprated to 960 hp. The final 15 of a batch of 100 A-2s were completed to A-4 standard, with enlarged fuel tanks to increase range. They were originally intended specifically for shipboard use as replacements for the 'fragile' A-1s.

Structural strengthening of the Ar 196 airframe resulted in the A-3, without the extra fuel capacity. A variable-pitch VDM propeller with a spinner was now standard. The final A-5 version differed only in some equipment changes, and twin MG 81Z machine guns for the observer. Close to 400 A-3s and A-5s are believed to have been produced.

All versions had wing folding and all were embarked on ships. From 1942, the earlier A-2 and A-4 were banned from making catapult take-offs, however. All models except the A-1 normally carried the 20 mm cannon which gave the Ar 196 a heavy punch for a small seaplane. The weight of the guns was a burden, however, restricting take-offs in the open sea to calmer conditions only. From late 1944, the MG FF cannon were sometimes replaced with more modern 15 mm MG 151 autocannon or MG 13 machine guns.

Note the swivel mount for the twin MG 81Z guns in the rear cockpit of this pristine Ar 196A-5, believed to be one of the first Fokker-built Arados, near the Fokker factory in Amsterdam-Noord. From here the aircraft could taxi to the Schellingwoude seaplane base. Not a great deal is known about the use of the Dutch-built machines (*Horizonten*)

While the first Ar 196s had been built in Brandenburg, series production was set up in the original Arado works at Breitling harbour in Warnemünde. Wings and floats came from the company's Anklam facility. Further decentralisation was ordered by the RLM to reduce the potential impact of enemy bombing. In the severe winters of 1939-40 and 1940-41, the weather was still more of a nuisance than RAF Bomber Command, the freezing of the river Warnow disrupting test and delivery flights.

A second assembly line was arranged in occupied France at SNCASO in Saint Nazaire – the site of the former Loire seaplane factory. The first French-built Ar 196A-3 completed its maiden flight on 5 July 1942, but a reluctant workforce and Allied air raids against the U-boat base next door combined to make sure that only 23 airframes were completed here over the next eight months. The quality of the work also left something to be desired, at least initially, and the first six aircraft were assigned to training units after being deemed unsuitable for operational use in the frontline.

The Fokker works in Amsterdam was bombed too in July 1943, but the Dutch company was found to be more collaborative and delivered 69 Ar 196A-5s from August. These were assembled from parts supplied from Germany and France, but also from various Dutch companies and sites, including the former Spyker car and aeroplane factory, a bicycle factory and a wallpaper factory. The Warnemünde assembly line closed in March 1944, and thus Ar 196 production ended after approximately 530 aircraft when Fokker completed its last airframe in August 1944.

By then, the Ar 196 was the last combat seaplane being built in Europe. With a reasonable performance and well-armed, it was much more of a warplane than its foreign counterparts in its original shipborne scout role. This does not automatically make it the best aircraft in its class, because its potential came at a cost in robustness and seaworthiness – and the ability to take off and land in a rough sea was often all that really mattered out on the ocean. The Arado was more at home, perhaps, in its alternative capacity as an inshore maritime patrol and anti-submarine aircraft. The wisdom of a seaplane fulfilling this role was already questionable, however, by the start of World War 2. Floats could come in handy over water, but seaplanes were increasingly outclassed by landplanes, both in performance and operating efficiency. One can feel sympathy for the German pilots who kept being sent up against far superior aircraft in the Ar 196, even in theatres where airfields were available.

RAF aviators learnt the hard way not to underestimate this German anachronism on floats, though. As Beaufighter navigator Tony Ross wrote, 'they were actually quite manoeuvrable and a fixed armament of two 20 mm cannon made them respectable makeshift fighters'.

Scharnhorst at sea after the outbreak of war in 1939, toting two Arados on its catapults. Note the rear catapult mounted right on top of one of the 28.3 cm main gun turrets (*Bundesarchiv, Bild-23-63-12, Slachtschiff Scharnhorst*)

CHAPTER TWO

FIRST BLOOD

The RLM's effort to keep the Ar 196 a secret, forbidding Arado's record attempts, seems to have been successful, and the first the outside world, or at least the foreign aviation press, saw of the new seaplane was a photograph published by *Flight* magazine in its 19 October 1939 edition. The shot had been taken during the Kriegsmarine's spring exercise, and it showed L2+X41 on the catapult of the pocket battleship *Admiral Graf Spee*. By the time the photograph appeared in print, *Admiral Graf Spee* was busy sinking British merchantmen in the South Atlantic, and the very first operational Ar 196 was the vessel's aerial lookout post.

The German surface fleet mostly resorted to piracy tactics during World War 2. Augmenting the efforts of the U-boats, lone wolf ships raided commercial vessels out on the high seas and kept enemy forces disproportionately busy searching for them. The Kriegsmarine was nowhere near as big as the Royal Navy. In fact, just five modern heavy units formed the backbone of the German fleet in 1939, and one of these – the pocket battleship *Admiral Scheer* – spent the first year of the war being refitted. The others were its sister ships *Deutschland* and *Admiral Graf Spee*, and the newer, much bigger battleships *Gneisenau* and *Scharnhorst.* There were also six light cruisers, but they were rather short on range and would have little impact on the war.

The battleships were each equipped with two catapults and two recovery cranes. *Gneisenau* normally embarked two seaplanes, while *Scharnhorst,*

Sailors from *Admiral Graf Spee* gather to watch the aeroplane that was being used by the photographer who took this shot as the vessel sailed south through the Channel in April 1939, bound for the Atlantic. Ar 196A-0 L2-X41 was on board for the new Arado floatplane's open ocean trials (*US Navy*)

which was the only ship with a decent hangar, could handle three. Aeroplanes were constantly exposed to the elements on the other vessels. The pocket battleships had a single catapult and operated one seaplane, like four of the light cruisers. If a spare aeroplane was to be stowed on board, it first had to be taken apart.

Three heavy cruisers and the battleships *Bismarck* and *Tirpitz* were added to the fleet during the first two years of the war. Some merchant ships were also converted to so-called auxiliary cruisers for the commerce raiding campaign. Raiding operations were kicked off, however, by the two operational pocket battleships shortly after the outbreak of war on 3 September 1939.

Often capturing the headlines in the 'Phoney War' period, *Admiral Graf Spee* and its sister ship *Deutschland* had actually been despatched into the Atlantic before the German invasion of Poland on 1 September. *Admiral Graf Spee* left Wilhelmshaven on 21 August after frantic preparations by Kapitän zur See Hans Langsdorff and his crew of 1180 men, including two aircrew (pilot Unteroffizier Heinrich Bongards and observer and aircraft commander Oberleutnant zur See Detlef Spiering) and five mechanics from 1./BoFlGr 196.

Although the Ar 196 had not yet entered regular service at this point, *Admiral Graf Spee*'s single He 60 seaplane was replaced by an Ar 196A-1 at the last minute, the third production aircraft arriving from Arado on the 19th. On 31 August a flap actuator on *Admiral Graf Spee*'s Arado broke and the brand new floatplane was out of action for two days while the mechanics under crew chief Werner Grotzki fixed the problem – the first, but by no means the last, repair job they would undertake.

Deutschland sailed on 24 August after receiving the fifth production Arado earlier that same day. During a flight on 5 September, pilot Feldwebel Haberkorn and observer Oberleutnant zur See Kell ran out of fuel and landed away from the ship. Their emergency signal was misread at first and the vessel searched for them in the wrong place, but the aircraft was eventually recovered. *Deutschland*'s supply vessel and tanker *Westerwald* carried an He 114, but the floatplane, intended mainly as a spare for the pocket battleship, pitchpoled against the ship's hull after its second landing on 6 September and was damaged beyond shipboard repair.

The Arados proved their worth on 11 September, when *Admiral Graf Spee* was replenishing from its supply vessel *Altmark* at sea. Sent up in their Ar 196 as a precaution, *Bongards* and *Spiering* spotted the British heavy cruiser HMS *Cumberland* approaching. Maintaining radio silence, they flashed light signals to *Admiral Graf Spee* and the supply ship, which dashed off, successfully evading *Cumberland*. The crew on board the heavy cruiser had failed to spot the floatplane.

The Führer hoped that Britain and France would make peace after the quick defeat of Poland, and the two pocket battleships were kept on a leash until naval high command in Berlin signalled the green light to start targeting merchantmen on 26 September. Four days later, off the

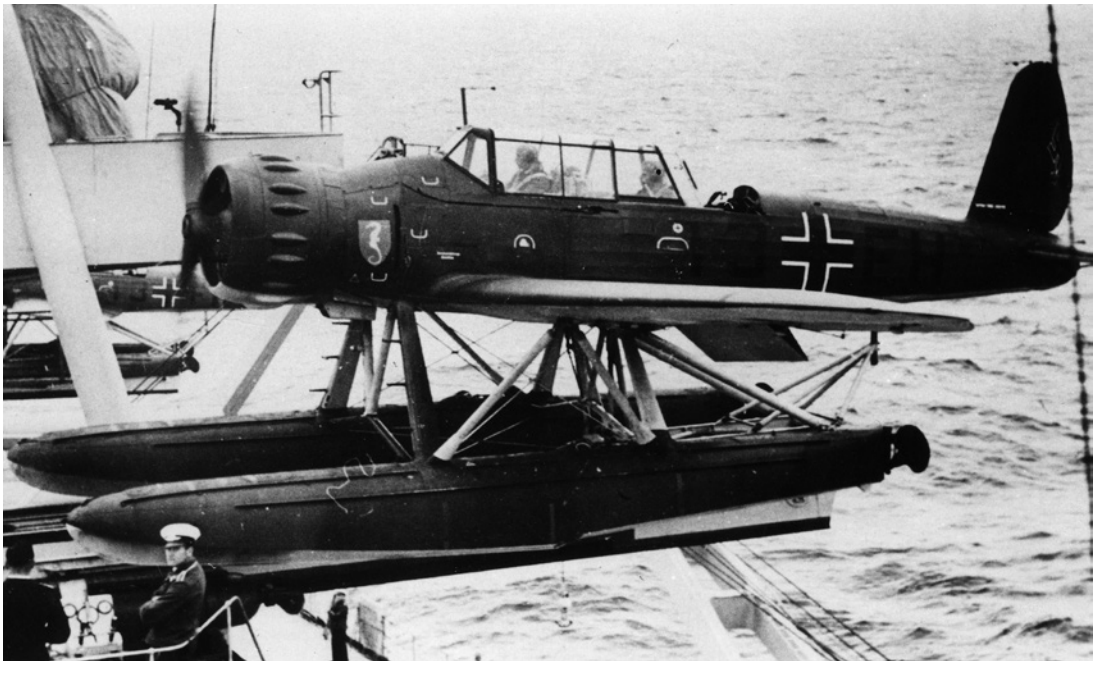
coast of Brazil, *Amiral Graf Spee* found its first victim, the British cargo steamer *Clement* – and the Ar 196 opened fire in earnest for the first time when Oberleutnant Spiering enthusiastically sprayed the ship with his machine gun. He was reprimanded for this by *Admiral Graf Spee*'s Kapitän zur See Langsdorff. German surface raiders mostly treated their victims in accordance with international conventions, which meant that the merchantman was stopped and boarded and its crew put in lifeboats with a correct course for the nearest port before *Clement* was sent to the bottom with its cargo of 20,000 cases of kerosene. No sailors lost their lives in the nine sinkings committed by *Admiral Graf Spee* in the final months of 1939, including three in the first two weeks of October.

Pilot Unteroffizier Heinrich Bongards and observer Oberleutnant zur See Detlef Spiering flew the very first operational Ar 196, embarked on board *Admiral Graf Spee* during its famous raiding voyage. The floatplane was painted with devious markings in the South Atlantic, with no swastikas, fuselage crosses reduced to dashes and bluish underwing roundels (*Horizonten*)

On 6 October the Arado developed a crack in its engine, which had run for only 19 hours, and the damage was so serious that the spare engine carried by the ship had to be installed. While this was being done, some devious markings were painted on the aircraft. The German crosses on the fuselage sides were reduced to little more than fat dashes between the unit code T3+AH and the swastikas on the tail painted out. Underwing, 'fantasy' roundels were applied in 'pale blue-grey-blue' that might be mistaken as British from a distance. Langsdorff did not abide by *all* international rules – *Admiral Graf Spee* itself would fly a large French ensign when 'rounding up' a ship.

The deception was somewhat successful for, on 22 October, Bongards and Spiering found the British freighter *Trevanion*, which was stopped before its captain realised that *Admiral Graf Spee* was German. The brave radio officer still transmitted a raider warning signal to the world, however, before the crew was taken prisoner and *Trevanion* blown up with its load of 8000 tons of zinc ore.

Farther north, meanwhile, *Deutschland* was experiencing foul weather, and things were not helped by the downtime of its Arado, which was damaged twice in rough landings during October. Not yet fully repaired, the floatplane was nevertheless sent up on 21 October to look for the tanker *Westerwald*. Only two merchantmen were sunk during *Deutschland*'s cruise, and a third taken over by a prize crew that unsuccessfully made for Germany. Kapitän zur See Paul Wenneker also caused diplomatic trouble by sinking a Norwegian vessel and confiscating an American ship, although his actions were supposedly legal because 'contraband' for Britain was being carried by both merchantmen. *Deutschland* was then called home and safely put into Gdynia, now the German port of Gotenhafen, on 16 November. It was at least unscathed, despite all the efforts of the British and French navies, which now had no fewer than 25 large warships in ten search groups committed to the hunt for the two German raiders.



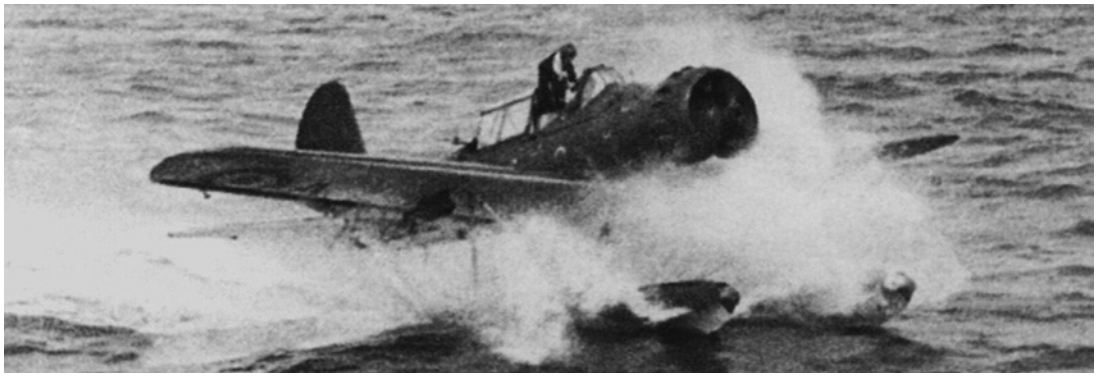
Ar 196A-1 T3+EH (Wk-Nr 0026) has its engine run up on *Scharnhorst*'s catapults during the first months of the war. Arado T3+FH (Wk-Nr 0020) can be seen behind the floatplane, both aircraft being embarked together with T3+DH when the British auxiliary cruiser *Rawalpindi* was sunk. Although the aircraft did not fly at all in the inclement November weather, all three were seriously damaged by the ships' own gun blasts and the heavy swell (*Andrew Thomas collection*)

Gneisenau, now equipped with two Arados, undertook a feint towards the Norwegian coast on 7 October, escorted by a light cruiser and nine destroyers. They turned back after having been spotted by an RAF Hudson, and one Ar 196 was damaged on board the battleship by its own AAA fire. The idea was to lure Royal Navy units into action, and in this respect the feint was successful. However, the subsequent attack flown by Luftwaffe bombers against the British ships on 9 October was not.

To divert attention from *Admiral Graf Spee*, a more serious sweep towards Iceland was undertaken by *Gneisenau* and *Scharnhorst* in late November 1939. The auxiliary cruiser HMS *Rawalpindi*, a converted P&O passenger liner, had the misfortune of running into the Kriegsmarine's best warships and was quickly sent to the bottom. Their five Arados did not fly at all owing to inclement weather, yet all were returned to 1./BoFlGr 196's Fliegerdeich base in Wilhelmshaven in a poor state of repair on 29 November, damaged by heavy seas and by the blast of the ships' own 28.3 cm guns when *Rawalpindi* was sunk. Undoubtedly, the two battleships had never previously fired their big guns in peacetime with seaplanes still attached to their catapults, one of which was actually mounted atop a main turret! Clearly, the criticism thrown at the new Arado by the Kriegsmarine was not always fully justified. *Admiral Graf Spee*'s Kapitän zur See Langsdorff wrote on 9 November;

'According to the airmen, the aeroplane provided here on board is the first airframe of this type built in Warnemünde, and, due to lack of time, was embarked without thorough testing. This was unknown here until now. It would have been better to take an old, reliable, slower He 60 instead of an insufficiently tested "test tube from the Warnemünde wharf".'

His frustration was certainly understandable, because his Arado had been hoisted back on board after a flight with a cracked replacement



Admiral Graf Spee's Arado taxies back to the ship, showing the underwing roundels that were neither French nor British, but are described as 'pale blue-grey-blue'. Note the light bombs still being carried by the floatplane, despite the frequency of landing mishaps with the aircraft. A hard landing put this Ar 196 out of action just before the Battle of the River Plate (*Horizonten*)

powerplant on 8 November. Supposedly, spray kicked up by the floats into the cowling upon landing cooled down the hot engine too abruptly. Perhaps Unteroffizier Bongards' landing technique was to blame, for only *Admiral Graf Spee*'s Ar 196 seems to have been haunted by this particular issue. Not having another engine, the mechanics glued the fracture with metal cement and contained it in a steel strap.

The patch seemed to be holding, and the floatplane was on its second flight of the day on 2 December when the battery for the radio gave up. Unable to find their way back to their ship, Bongards and Spiering alighted somewhere in the ocean, damaging the left float in the process and causing it to flood. Further adding to their predicament was the failure of *Admiral Graf Spee* to immediately react to the crew's signal for help, which was sent automatically by the aircraft's emergency transmitter. The left wing was already dipping into the ocean and the two men thought their emergency rations were their last supper when, at twilight, *Admiral Graf Spee* at last appeared to rescue both them and the Ar 196.

Shortly after they had flown off in one direction at noon, the ship's tower-head optical rangefinder had revealed smoke in the opposite direction at a distance of 53 km (33 miles), and *Admiral Graf Spee* had spent the afternoon 'rounding up' and sinking the British cargo liner *Doric Star*. The events of the day illustrated not only how seaplanes could be a headache for a warship's captain, but also that they were no longer needed for short-range spotting. *Admiral Graf Spee* was, incidentally, one of the first ships in the world to carry radar, in addition to its advanced optical sensors.

Still, *Admiral Graf Spee*'s Ar 196 was very important for reconnaissance work. Fortunately, the mechanics managed to repair the damaged seaplane, which encouraged Langsdorff to strike at the River Plate estuary off Buenos Aires before heading for home. On 11 December, however, the Arado's engine block broke when Bongards made a rough landing. The aircraft was finally knocked out. The timing could hardly have been worse. Two days later, *Admiral Graf Spee* ran into the Royal Navy's Force G, made up of the cruisers HMS *Exeter*, HMS *Ajax* and HMS *Achilles*. In the ensuing Battle of the River Plate, *Admiral Graf Spee*'s guns severely damaged *Exeter*, but the German ship was also seriously hit. Pilot Unteroffizier Heinrich Bongards and Luftwaffe mechanic Hans-Eduard Sümmerer were among the 36 personnel killed during the engagement that also left the unserviceable Arado burnt out on the catapult.

Langsdorff, wounded by splinters, had no choice but to put into Montevideo for repairs. Neutral Uruguay could grant him only 72 hours in port as per Article 17 of the Hague Convention of 1907 – only enough time for the Germans to bury their dead at the Cementerio del Norte in Montevideo. On 17 December, Langsdorff had his doomed ship scuttled in the River Plate before shooting himself in a Buenos Aires hotel room two days later.

WESERÜBUNG AND ITS AFTERMATH

While the explosions that sank *Admiral Graf Spee* still resonated in Wilhelmshaven and Kiel, training on the new Arado seaplane gained pace, despite the severe weather in the winter of 1939-40 and several serious crashes. At Holtenau the second embarked *Staffel*, 5./BoFlGr 196, had received its first Ar 196s in October, and cannon-armed Ar 196A-2s were delivered to both units from December. 5./BoFlGr 196 was responsible, in principle, for equipping the light cruisers and auxiliary ships.

The first outing of its Arados on board the light cruisers *Leipzig* and *Nürnberg* was a fiasco, however. On 13 December over the German Bight, the embarked aircraft flew an anti-submarine patrol but then had to make for Sylt Island because, even so close to home, it was too dangerous for the ships to slow down and recover their aircraft. Co-operation with shore-based He 115s proved troublesome and both ships were torpedoed by the British submarine HMS *Salmon*, with *Leipzig* in particular sustaining serious damage.

Two new heavy cruisers, *Admiral Hipper* and *Blücher*, were, meanwhile, joining the fleet. Heavier than the pocket battleships, which from now on were also classified as heavy cruisers, the new ships came with a hangar for two aeroplanes, of which one disassembled. Two or three Ar 196s were embarked. The third ship in the same class, *Prinz Eugen*, would enter operational service a year later, while two more were never completed. One of the latter, to have been named *Lützow*, was sold to Germany's temporary ally the Soviet Union. The deal included four Arado Ar 196s! The name *Lützow* was transferred to *Deutschland* to confuse the Allies – Hitler was also worried that a ship named 'Germany' might be sunk.

Escorted by *Admiral Hipper*, *Scharnhorst* and *Gneisenau* undertook a short mission in February 1940 aimed at British ships hauling iron ore from the Norwegian port of Narvik. In this case the Arados were able to fulfil their duties, except that they did not find any targets because the German fleet squadron had been detected.

The iron ore port was one of the main objectives of Operation *Weserübung*, the invasion of Norway and Denmark in April 1940. The *Staffelkapitän* of 1./BoFlGr 196, Hauptmann Gerrit Wiegmink, informed his crews of the upcoming big event on 6 April, and over the next few days, almost the whole Kriegsmarine set sail to escort and help transport troops to six Norwegian ports between Oslo in the south and Narvik in the far north. While the campaign was generally successful, Hitler's navy suffered very serious losses.

In the Oslofjord, *Lützow* and *Blücher* were both hit by shells fired from 28 cm guns in the old fortress at Oscarsborg. One struck near *Blücher*'s

hangar, setting both embarked Ar 196s on fire – one on the catapult and the other in the hangar. Their destruction did not matter because the brand new heavy cruiser was finished off by two elderly torpedoes fired from the fortress, capsizing and sinking with considerable loss of life. The ship's captain, Kapitän zur See Heinrich Woldag, survived and was flown back to Germany in *Lützow*'s Arado to report to the Führer. He was dead a few days later, killed, according to the official account, in a Ju 52/3m crash.

Admiral Hipper arrives at Trondheim on 9 April 1940, the ship having been rammed by the destroyer *Glowworm* the previous day. One of its Ar 196s had also been seized by the Norwegians, although the sailors and alpine troops seen here did not know that. The remaining two Arados attacked Vaernes airfield that morning (*Horizonten*)

The light cruiser *Karslruhe*'s Arado saw action at Kristiansand. Pilot Leutnant zur See Martin Luther made a hair-raising catapult take-off with his flaps frozen in the up position, touching the water before struggling into the air. In a rare case of the Ar 196 fulfilling its classic artillery spotting role, observer Oberleutnant zur See Hermann Hesse directed the ship's fire against the Odderøya coastal fortress until it was silenced. The aeroplane then attacked the fort's radio station. When leaving the area with the Arado back on board, however, *Karlsruhe* was torpedoed by a British submarine and damaged so badly that it was scuttled. Sister ship *Königsberg* was damaged by the Norwegian coastal artillery at Bergen, and duly sunk the next day by Blackburn Skuas of the Fleet Air Arm.

Bound for Trondheim, *Admiral Hipper* also encountered the Royal Navy. It sank the destroyer HMS *Glowworm* with radar-guided fire during the morning of 8 April, and although it was rammed by the British vessel prior to its demise, the heavy cruiser suffered only modest damage. That afternoon, *Admiral Hipper* launched one of its three Arados to reconnoitre the approaches to Trondheim. The ship was still too far out for 6W+BN to return at the end of the mission, so Oberleutnant zur See Werner Techam and pilot Leutnant zur See Hans Polzin were instructed to land in a cove and spend the night there. Having alighted near Lyngstad on the Lauvøy Fjord, they were arrested by some attentive civilians, however, who did not believe the explanations of the two German airmen, even though the invasion had not yet begun. The next morning, invasion day, *Admiral Hipper*'s remaining two Ar 196s bombed Vaernes airfield, and on a later flight one of these aircraft seems to have had an indecisive clash with an RAF Sunderland flying boat.

The hardest battle awaited the German troops in Narvik, where ten of the Kriegsmarine's 20 destroyers were sunk after landing troops. Covering this force, *Gneisenau* and *Scharnhorst* had a brief encounter with the battlecruiser HMS *Renown* off the Lofoten Islands and suffered some damage. The weather was stormy and the Arados again could not distinguish themselves. Because the ships' signals did not seem to reach Germany, *Scharnhorst* launched one of its three floatplanes on the 10th

with orders for its crew to despatch a situation report from Trondheim, some 1000 km (620 miles) to the south. When it safely arrived over the Trondheimfjord, the sailors of *Admiral Hipper* must have assumed this was their own missing aircraft.

6W+BN, however, had been towed off by a Norwegian torpedo boat. With the addition of Norwegian markings, the Arado was pressed into service with the highly improvised Romsdalsfjord Air Group. Its other assets were an old Royal Norwegian Navy Air Service Marinens Flyvebaatfabrikk MF.11 floatplane and a Supermarine Walrus from the battleship HMS *Rodney* that had been interned by the Norwegians a few days earlier! Now allied, its British crew was happy to join the makeshift Norwegian air unit for the time being, as was the crew of a second Fleet Air Arm Walrus that arrived on a liaison mission on the 13th. Based at Eidsøra, this odd assortment of seaplanes undertook local reconnaissance flights for about a week.

On 18 April, with available fuel running out, the four aircraft were flown to Scapa Flow, via the Shetland Islands. With three people on board, the faster Arado flew alone and reached Scapa Flow without incident, although the MF.11 was attacked by Gladiator pilots who thought it was chasing the two Walruses. The Ar 196 was flown to the Marine Aircraft Experimental Establishment (MAEE) for evaluation, but Cdr Byras crashed the aircraft upon arrival at the MAEE, then based at Rhu, near Helensburgh in Scotland. Byras freely admitted that the Ar 196 was not actually difficult to fly, but now there was only a wreck to examine.

Meanwhile, the damaged *Scharnhorst*, *Gneisenau* and *Admiral Hipper* reached Wilhelmshaven for repairs. The Arado crews found their colleagues from BoFlGr 196 busy with in-shore coastal patrol flights to combat the menace of British submarines, especially in the Skagerrak and the Kattegat. With Denmark overrun by the Germans, it was decided on 13 April to despatch the non-embarked Ar 196A-2s of 5./BoFlGr 196 under *Staffelkapitän* Hauptmann Grohé, joined by three available 1./BoFlGr 196 aircraft, to Aalborg, in Denmark, to bolster the He 115s of 1./*Küstenfliegergruppe* (KüFlGr) 906.

It should be explained that during World War 2, submarines spent most of their time on the surface, and dived only to attack or to escape from danger. Thus, a small reconnaissance aircraft like the Ar 196, without advanced sensors but manoeuvrable and quick to get its light bombs on target, could be the submariner's worst enemy, and in the Scandinavian summer season, this was even true at night.

The submarine *Seal* was already in great trouble and making for Sweden when it was attacked by two Arados in the early morning of 5 May 1940. The subsequent capture of the vessel by two German airmen was much exploited by Nazi propaganda and the Arado advertising department alike. 6W+IN (Wk-Nr 0056) was flown by Unteroffizier Heinz Böttcher and Leutnant zur See Günther Mehrens and was adorned with a kill marking on its tailfin. The two decorated airmen went missing in action in another Ar 196 less than two weeks later (*Horizonten*)

On 5 May at 0200 hrs, two Ar 196A-2s and several He 115s took off from Aalborg in the pre-dawn light. Thirty minutes later, near Skagen, Unteroffizier Heinz Böttcher and Leutnant zur See Günther Mehrens in Arado

6W+IN discovered the British mine-laying submarine HMS *Seal*, which had already been damaged an He 115 and a German anti-submarine mine. It had just resurfaced with great difficulty, the crew suffering from carbon dioxide poisoning. As the boat limped towards neutral Sweden, the floatplane attacked with its 50 kg bombs and gunfire, wounding two men in the submarine's tower. The other Arado, flown by Unteroffizier Sackritz and commanded by Leutnant zur See Karl Schmidt, joined the attack, and the submariners waved a white tablecloth in surrender at 0300 hrs.

The art of seaplane maintenance was never easy, but the Ar 196 proved its worth in shore-based anti-submarine operations in the aftermath of Operation *Weserübung*. This aircraft was photographed at Trondheim-Ilsvika in the high summer of 1940 (*Horizonten*)

Schmidt instructed Sackritz to land and, with the other Ar 196 circling overhead, ordered *Seal*'s captain, Lt Cdr Rupert Lonsdale, to swim to the floatplane. The Ar 196's rear cockpit was fairly roomy, with the observer's seat sliding on rails between his radio equipment and machine gun, and it could take a passenger with ease. Schmidt took Lonsdale on board 6W+EN and departed back to base with his prize. Not to be outdone, Böttcher and Mehrens also landed and flew off with the submarine's coxswain.

An He 115 and a third Ar 196, 6W+VN, also alighted on the scene. The He 115 commander signalled that the Arado's observer, Leutnant zur See Behrmann, should board the submarine, but then another aircraft arrived overhead and pilot Unteroffizier Kreutzfeld scrambled back into the air. Behrmann and Kreutzfeld opened fire at the unknown aircraft, which wore 'English camouflage', with their flexible gun and cannon, before recognising it as a Ju 86, which Behrmann then correctly assumed to be Swedish. 'We therefore abstained from combatting this machine', he reported dryly. Failing, between them, to board the submarine, the four Luftwaffe crews were lucky that the sick British sailors failed to scuttle *Seal*, and a naval trawler which Mehrens had alerted was able to tow the boat to Frederikshavn afloat.

The rather simplified 'seaplane captures submarine' story was a propaganda coup for Germany and, no doubt, a boost for the Ar 196 community. Böttcher and Mehrens did not enjoy their Iron Crosses for long, however, disappearing over the Kattegat during another submarine patrol on 17 May. 5./BoFlGr 196 lost a second Arado that same day, the aircraft accidently being shot down near the island of Læsø by a German patrol boat.

Meanwhile, the fighting in northern Norway still continued, and on 4 June *Gneisenau*, *Scharnhorst* and *Admiral Hipper,* escorted by four destroyers, left Wilhelmshaven again to interfere with British shipping. During the morning of 8 June they sank the tanker *Oil Pioneer* and an escorting naval trawler. At 0825 hrs *Scharnhorst* and *Admiral Hipper* each launched an Arado to search for more targets.

Scharnhorst's aircraft spotted the hospital ship HMHS *Atlantis*, which was allowed to proceed unmolested, and the troop transport *Orama*, which was sunk by *Admiral Hipper* and the destroyers. Fortunately for the British, the ship was empty – except for more than 100 German prisoners of war.

Admiral Hipper's Arado also reported other ships to the south, but *Gneisenau* and *Scharnhorst* searched for them unsuccessfully before turning north. In the afternoon, in exceptionally clear weather, a lookout on *Scharnhorst*'s foretop saw a distant wisp of smoke. The resulting action saw the sinking of the carrier HMS *Glorious*, inexplicably sailing without mounting air patrols and escorted by only two destroyers, which were also sunk. More than 1200 British sailors lost their lives. *Scharnhorst* was damaged by a torpedo, and again two Arados suffered blast damage from the battleships' own guns.

The German vessels then retired to Trondheim, from where *Scharnhorst*, provisionally repaired, left for a German dry dock at reduced speed on 20 June. It was found and attacked by British aircraft on the 21st, and one of its Ar 196s is said to have joined some Bf 109s in chasing away a Sunderland. The crew of the latter cryptically reported that they had been 'shadowed by an He 60, which dropped a bomb, falling about 50 yards away'. According to the ship's logbook, the floatplane flew only an anti-submarine patrol, and that bomb may unintentionally have damaged the German U-boat *U-99*, commanded by Korvettenkapitän Otto Kretschmer.

To draw attention away from *Scharnhorst, Gneisenau* and *Admiral Hipper* mounted a feint towards Iceland, but this time *Gneisenau* was torpedoed and damaged. As they withdrew into the Trondheimfjord again, *Admiral Hipper* was the Kriegsmarine's sole major warship still fit for combat. The light cruiser *Nürnberg* was also still afloat, and it transported a battalion of mountain troops to Narvik. En route, the ship's Ar 196, which had been borrowed from *Scharnhorst*, unsuccessfully attacked a British submarine near Narvik.

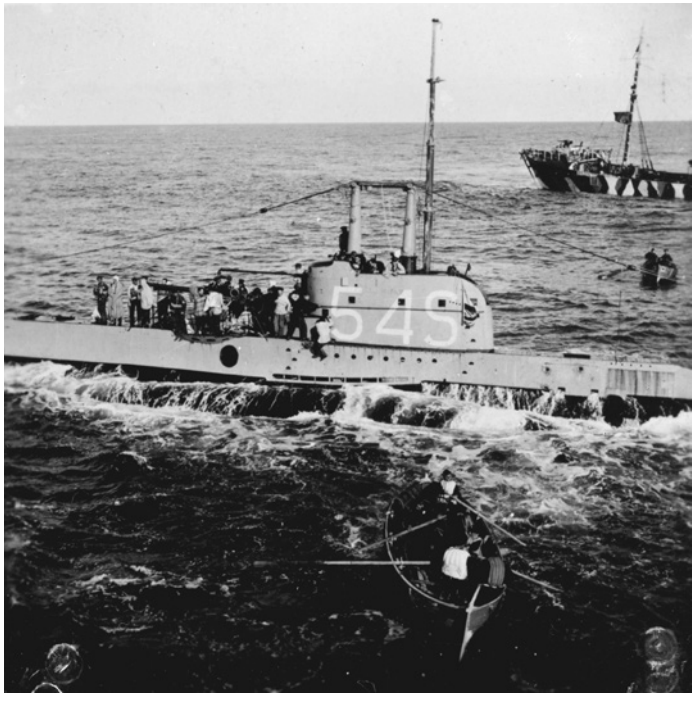
The seaplanes of *Gneisenau* and *Admiral Hipper* also made themselves useful by guarding the approaches into the Trondheimfjord. On 26 June at 0220 hrs, one of *Admiral Hipper*'s aircrews sighted a surfaced submarine east of the Nordøyan lighthouse. Unteroffizier Hermann Koch and Leutnant zur See Freundenthal attacked with their two 50 kg bombs and 20 mm cannon and the boat dived with an apparent list, leaving an oil slick according to the two aviators who were credited with a sinking and each awarded an Iron Cross. In fact, HMS *Triton* had escaped unharmed.

The anti-submarine efforts in the Trondheimfjord were joined by the main element of 5./BoF1Gr 196 with five Ar 196s. Coming from Aalborg, the unit had spent a few days in Germany at Grossenbrode patrolling the Fehmarn Belt, prior to receiving orders to deploy to a new seaplane base near Trondheim, Hommelvik, on 20 June. Sister *Staffel* 1./BoFlGr 196 similarly deployed a five-aircraft element, led by *Staffelkapitän* Wiegmink, to Stavanger-Sola on 3 July.

During the night of 4 and 5 July, Oberleutnant Schreck and Oberleutnant zur See Junker of 1./BoFlGr 196 attacked a submarine and claimed it damaged. The next evening, Unteroffizier Manjok and Leutnant zur See

Gottschalk in T3+LH also attacked a submarine, misidentified as HMS *Sealion*. They refuelled and rearmed at Sola-See and then, on their second flight that night, discovered HMS *Shark* off Skudesneshavn. Gottschalk later recalled;

'I suddenly saw, to my right in the north, a surfaced submarine. It moved along totally unaware and had not noticed me, even though the distance was only 1000 m. I took the time to turn south and to climb to an altitude providing enough accuracy in a diving attack. It was still surfaced. Nearly vertically, we dived at the sub. No anti-aircraft fire welcomed us. The first bomb was released. We pulled level and observed the impact. The bomb hit the surface of the water next to the stern of the boat. A big fountain of water climbed up. We immediately gained altitude again for the second attack.'



Wounded crewmen from the submarine *Shark* stand on the deck awaiting the arrival of German trawlers. Ar 196 T3+LH of 1./BoFlGr 196 inflicted the crucial damage to the vessel (*IWM, A 30496*)

Shark's crew thought that at least four bombs fell. Of course the Arado carried just two, but they did considerable damage, and the aeroplane also strafed the submarine before it dived, leaving a large oil slick. The boat could not be trimmed and had to resurface. The aircraft had flown back to Sola to refuel and rearm, before returning at 0115 hrs and attacking again – by now it had been joined by several other Ar 196s, two Do 18s and four Bf 109s. The crew of the submarine returned fire determinedly, despite numerous casualties caused mostly by the Messerschmitts, and three Arados and one Dornier were slightly damaged before captain Lt Cdr Peter Buckley decided to hoist a white flag.

Arado T3+BH of Schreck and Junker landed, but their port float had been holed and their aircraft sank while tied up alongside the submarine. Together with two British officers, the Arado crew was taken on board by one of the Do 18s. German naval trawlers picked up the other seamen, but the submarine sank before it could be towed into port.

On 25 July, after escorting *Gneisenau* out of Trondheim on its way back to Germany for further repairs, *Admiral Hipper* took a right turn and steamed north into the Barents Sea on a commerce raiding patrol. On 31 July its Arado, T3+CK, overturned whilst landing alongside the ship. The crew was rescued but the floatplane could not be salvaged and was sunk with gunfire. The only success of the voyage was the seizure of the Finnish freighter *Ester Thorden*, which, after it was found to be carrying contraband, was sent to Tromsø with a prize crew. *Admiral Hipper* returned to Wilhelmshaven on 11 August, and its remaining Ar 196 arrived back at 1./BoFlGr 196's base on the Fliegerdeich that same day.

CHAPTER THREE

AHEAD OF THE ATLANTIC WALL

By the summer of 1940, the Germans had made themselves at home at Schellingwoude, on the eastern side of Amsterdam. This was the main operating base of 1./BoFlGr 196 for some time, although 6W+EN of 5./BoFlGr 196 may just have been staging through on its way to France. This was probably one of the aircraft that conquered *Seal*. The tail of an He 115 can just be seen off to the left (*NIMH*)

While concluding operations in Norway, the German Wehrmacht had blitzed Holland, Belgium and even France, and, with the Ar 196 having now proven its effectiveness in coastal roles, this meant more calls on its capabilities – and on the men of the two *Bordfliegerstaffeln*. On 1 August 1940, a *Teilstaffel* (partial squadron) of 1./BoFlGr 196 arrived at Schellingwoude – Amsterdam's seaplane station on the IJsselmeer. The main missions flown by Ar 196 crews from the recently occupied territories were anti-submarine patrols and escorting coastal shipping on the new supply routes to the north and west. Another more urgent task was quickly ordained by the Luftwaffe, however.

On 9 August, an advance party flew from Wilhelmshaven to Boulogne-sur-Mer in a Ju 52/3m to set up a new *Aussenkommando* (detachment). As the Battle of Britain raged, Arados were stationed on the French Channel coast to try their hand in the search and rescue role. The slow Heinkel He 59 rescue floatplanes of the *Seenotdienst*, unarmed and painted white with red crosses, were being shot down by the RAF, which stated that such aircraft were not covered by the Geneva Convention.

Nine Arados arrived in Bolougne's small seaport from Schellingwoude on the 13th. The crews found good lodgings in the Hôtel du Mail, but the aircraft had to be moored at a wooden barge in the port. Each morning, an old fishing boat ferried the He 59 crews of *Seenotflugkommando* 3 and the 'Arado men' to the floating platform, christened 'Base Peter',

where they spent the day reading, sunbathing and dozing until called into action.

During the late afternoon of 15 August, *Staffelkapitän* Hauptmann Gerrit Wiegmink and his observer, Leutnant zur See Dietrich Schlenker, were airborne over the Strait of Dover in Ar 196A-2 T3+DH, no doubt looking for one of 75 aircraft lost by the Luftwaffe that day, when suddenly Schlenker spotted ten Spitfires approaching low over the sea. Wiegmink later reported;

'At dashing speed, the ten Spitfires closed in, assuming a wedge formation and opening fire at 1000 m. Bullets from 80 machine guns were all around us as we made for the French coast at full throttle. Suddenly, I felt a violent beat on my right shoulder. Hit!'

Their assailants were actually six Spitfire Is of No 266 Sqn, scrambled from Manston to intercept an 'He 115 seaplane' detected on radar 19 km (12 miles) off Deal. On that day, however, the RAF learned for the first time that the Ar 196 could be a surprisingly dangerous opponent if flown by an able pilot, which Wiegmink evidently was;

'When the fighters were at about 600 m, I simply threw the aircraft around, and in a steep turn I headed straight into the charging *Engländer*, firing at one and keeping it in my sight until it passed three metres over me trailing a long white smoke plume. It broke out of its formation and, rapidly losing altitude, disappeared towards the English coast. I don't know if it made it.

'The enemy fighters regrouped and again attacked my aeroplane from behind. I had to fly as low as possible to prevent an attack from below. There were four, five, maybe six attacks. Again I threw the Arado around, smack into the enemy formation. Again and again. My observer must have been killed during the third attack. Until then, he calmly returned fire and still found time to call the distance and position of those enemy aircraft for me as I could not see them myself. In doing so, he had enabled my first counter attacks.

'The enemy fighters changed tactics. A few took position further back on both of my sides, so I would still have fighters in my neck if I turned towards them. It was hopeless. Already pieces of skin were tearing off the wings. The glass canopy shattered. My head shivered and my hand also jerked.

'During the battle, I had been approaching two German R-Boote, hoping that they would engage the pursuers. My Arado's engine had also been hit and ran very irregularly. But finally in an abrupt left turn I caught a Spitfire in a right turn from below and shot my ammunition into this opponent. I saw a black smoke plume, and in a flash witnessed the Spitfire going down.

'My brave Arado, which had kept me in a battle against a tenfold superior enemy for 15 minutes, now gave up. I crashed into the water almost simultaneously with the second Spitfire I had shot down. It all went so fast. I saw how my Arado alighted with one float down. I experienced the splashing of the impact, the roaring whirl of the spray and, suddenly, a dark green veil that engulfed me. The Arado turned over, going under water immediately but held up for a few seconds by the least shot up float. This was enough time for me to free myself, and already almost unconsciously I must have crawled through the

shot up canopy. The float was still afloat, but when I wanted to cling to it, it sank.

'Twenty minutes later I was picked up by one of the R-Boote. A sailor dressed my shoulder wound and found that I also had a wound in the back of my head.'

Schlenker was probably already dead when the floatplane crashed. Sgt Frederick Hawley in Spitfire I N3189 failed to return that day, shot down by Wiegmink, who also claimed another Spitfire damaged.

Three airmen were rescued by the *Aradomänner* from Boulogne on 18 August, and a Bf 109 pilot three days later. Then, on the 28th, pilot Oberfeldwebel Johannes Westphal and Leutnant zur See Karl-Adolf Schlitt spotted the four crew of a crashed Ju 88 bomber just three miles off Dover. They landed and both men got out on the floats of the Ar 196 to pull three survivors from the water, Westphal adjusting his throttle, control column and water rudder from outside the cockpit. They then managed to heave and squeeze all three men into the rear cockpit, with Schlitt sitting on top of them. The Ju 88 pilot had to be left in the water as a British vessel approached and opened fire. Despite having five souls on board, the Arado still managed to take off for a short flight to Boulogne. Westphal and Schlitt then went back and successfully rescued the pilot of the Ju 88.

The same crew rescued another two German airmen on 4 September, and a Bf 109 pilot the following day. Despite these successful missions, the Ar 196's limitations as a rescue aircraft had by then been fully realised, and 1./BoFlGr 196 left Boulogne and returned to Schellingwoude on 18 September. The latter site would remain the unit's primary operating base during this period, even though its headquarters were at Wilhelmshaven.

Meanwhile, 5./BoFlGr 196 had moved to Cherbourg, on the Normandy coast, by mid-September, although the port's artificial harbour proved to be far from ideal. Detachments were set up at Lanvéoc-Poulmic (called Brest-Süd by the Germans), which was a proper seaplane base and became the new *Staffel* headquarters in April 1941, and at Hourtin, located on a lake near Bordeaux and nowhere near Brest as is sometimes stated.

According to one count, 24 U-boats were sunk by Allied submarines during the war, usually close to their bases in Norway and France and in the Baltic. With eight U-boat flotillas being based on the coast between Brest and Bordeaux, 5./BoFlGr 196 was entrusted with an especially important anti-submarine patrol responsibility over the Bay of Biscay.

An Arado is moved up behind another Ar 196 prior to both aircraft being lifted into the water by the seaplane crane at Brest-Süd. 5./BoFlGr 196 enjoyed good facilities here, the base having previously been known to the *Aéronavale* as Lanveóc-Poulmic. Missions flown from here over the Bay of Biscay were fraught with danger, however, as RAF Coastal Command aircraft were often encountered (*Horizonten*)

In Scandinavia during June 1940, Aalborg-See became the new base of 1./KüFlGr 706, which simultaneously began to replace its old coastal reconnaissance He 59s with a number of Ar 196s, as well as He 115s, for anti-submarine patrol and escort work, mostly over the Skagerrak. When short of aircraft, 1./KüFlGr 706 could

Immediately after overrunning Denmark on 9 April 1940, the Germans began building a seaplane base at Aalborg, a strategic location on the Limfjord in northern Jutland. 1./KüFlGr 706 was based at Aalborg-See in September 1940, the coastal reconnaissance *Staffel* receiving He 115s and Ar 196s to replace its old He 59s. Two of the latter can be seen here in the background (*Horizonten*)

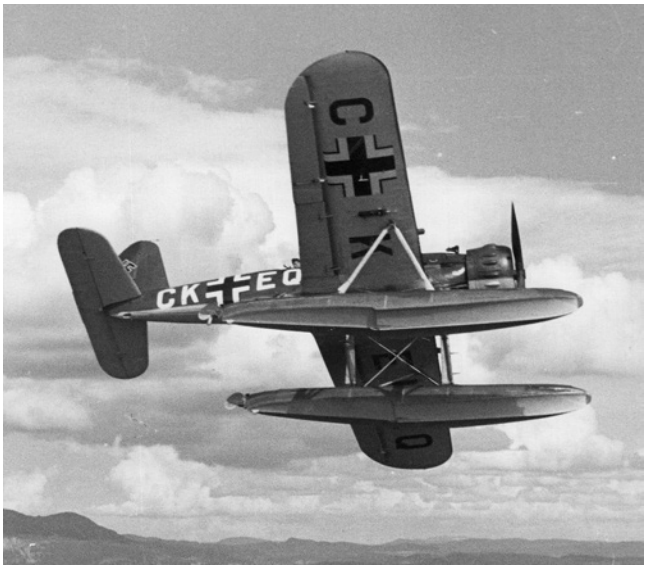
call upon the Arados of the co-located, and newly formed, Ar 196 and He 114 operational training *Staffel*, initially designated 3.(*Bordflieger*)/*Flieger-Ergänzungsgruppe* (*See*) and part of the seaplane operational training group at Kamp, on the Baltic coast. By then, some of the older Ar 196s had also been transferred to the advanced seaplane flying school in Pütnitz and the seaplane weapons schools at Parow.

SERIOUS ATTRITION

Ar 196 losses to all causes appear to have been rather steep throughout the war, and this was certainly the case during the summer and autumn of 1940. Returning from an early mission from Schellingwoude, Unteroffizier Johannes Schmiade badly damaged an 1./BoFlGr 196 aircraft in the late evening of 1 or 2 August. He was killed just a few days later when he crashed another Ar 196 – the observer was wounded. At Boulogne on 15 August, the same day Hauptmann Wiegmink was shot down, another machine sank alongside the refuelling barge after one of its floats was holed in flight by fire from a British vessel. It was officially reported as having suffered 80 per cent damage, which, in Luftwaffe parlance, meant a probable write-off with some salvageable parts. Two further Arados at Boulogne were slightly damaged on 24 August by the swell, by flak shrapnel and by the crash of a British aircraft!

Seven days later, at 2230 hrs, an aircraft of 1./BoFlGr 196 crashed upon landing on the IJsselmeer, east of Schellingwoude near Nijkerk. Local lock-keeper Kedde telephoned the town's mayor, Bruins Slot, who turned up in person to join Kedde in his boat, and they rescued the unconscious pilot, Unteroffizier Scheel, and observer Leutnant zur See von Kuhlberg. This act got the mayor off the hook for the celebrations held in his town earlier that day to mark the birthday of exiled Queen Wilhelmina. Apparently, the Ar 196 crew had diverted because their base was under attack by a Bristol Beaufort from No 22 Sqn. The Arado was salvaged, but written off.

On 4 September Schellingwoude's T3+AH was slightly damaged in a skirmish with a Handley Page Hampden, and the Dutch detachment



Aalborg-based Ar 196A-2 CK+EQ (Wk-Nr 0081) is seen breaking away from the camera in a shot taken by Kriegsmarine photographer Karl Eschenburg. An ESK 2000B gun camera is installed atop the fuselage immediately aft of the engine. This airframe was seriously damaged in an emergency landing in the Skagerrak on 4 September 1940 (*Horizonten*)

lost two more Ar 196s during October when they crashed whilst undertaking anti-submarine patrol flights. All four crew were killed.

While still in Norway, 5./BoFlGr 196 lost two Ar 196s on 19 August in the Moldefjord, again with four airmen being killed. Flying into bad weather, the first aircraft crashed into the cliffs while escorting the supply ship *Dithmarschen*. The second Ar 196 hit a power line while searching for the first downed floatplane. The next day, an Ar 196 was reported sunk at Narvik in a storm, with another floatplane damaged. On 4 September, a 5./BoFlGr 196 pilot made an emergency landing in the Skagerrak because of a broken fuel line. His Arado was 70 per cent damaged.

Staging through home at Kiel on its way to France, 5./BoFlGr 196 had the cockpit of an Ar 196 burnt out in a shooting exercise at Holtenau and, on 1 October at Cherbourg, it lost no fewer than four aircraft in a storm. The next day, the *Staffel* lost another Arado at the other end of the world, embarked on board the auxiliary cruiser *Komet* in the Pacific.

The aircraft damaged on 4 September was borrowed from one of the new Aalborg units, which also met with incidents themselves. 1./KüFlGr *collection* 706 lost an Arado on 8 September when it sank at its buoy in a storm. The weather at the newly built German seaplane base on the Limfjord – actually an inland sea – could be quite temperamental as it turned out, and frequently the seaplanes were forced to divert to the more secluded harbour of Thisted. An Ar 196 of the operational conversion *Staffel* was badly damaged when it struck two of the unit's He 114s on take-off from Aalborg-See on 22 September.

The enemy had remarkably little to do with most of this mayhem, although the RAF was of course on the prowl, too. On 12 October the CO of 5./BoFlGr 196, Hauptmann Thewaldt, and his pilot, Unteroffizier Kottwitz, failed to return from a patrol over the Channel. Their floatplane had been shot down by Hurricane Is of No 145 Sqn. Escorting a steamer on 29 October, another Arado crew from 5./BoFlGr 196 encountered two Blenheim IVFs and, after an indecisive eight-minute clash, correctly reported that these were fighter versions with chin-mounted machine guns. A month later, on 26 November, a *Rotte* (pair) of 5./BoFlGr 196 aircraft on an anti-submarine patrol was attacked by six Blenheim IVF fighters, one of which was claimed shot down.

On 8 February 1941, the unit lost Thewaldt's replacement as *Staffelkäpitan*, Hauptmann Adolf Bergér, to Westland Whirlwind twin-engined fighters of No 263 Sqn. Sgt Rudland had spotted the Arado on an anti-submarine patrol 19 km (12 miles) south of Start Point, near Dartmouth in Devon, and quickly latched onto the floatplane's tail but did not fire, thinking he saw British roundels on the fuselage. The No 263

Sqn Operations Record Book details what happened next;

'F/O Hughes carried out an attack from the front quarter, ending in a beam attack, opening at 450 and closing at 200 yards. A five-second burst was fired, but no results were observed. Meanwhile, F/L Crooks and P/O Graham had taken off from St Eval. At Dodman Point P/O Graham was ordered to patrol below the cloud, while F/L Crooks patrolled above. F/L Crooks came back down through the clouds and just as he emerged, passed P/O Graham who was going West. He did a gentle left hand turn, intending to call P/O Graham and tell him to formate on him, but to his surprise found that P/O Graham had disappeared. Suddenly, he saw an enemy aircraft come through the cloud on his left going lower and lower until it hit the water. F/L Crooks had difficulty in identifying the enemy aircraft, but he saw floats uppermost on the water and black crosses on a piece of wing wreckage. P/O Graham did not return from the patrol. A coast guard reported that two aircraft had crashed in flames into the sea at 0950 three miles off the shore.'

Ten Ar 196A-3s of 5./BoFlGr 196's detachment at Hourtin, a seaplane base on a lake near the mouth of the Gironde, bask in the summer sun. All have been adorned with the *Staffel*'s Hanseatic cog insignia. It was common to see personnel in swimwear on a *Seefliegerhorst* (*Andrew Thomas collection*)

It is not very likely that the two aircraft shot each other down, and more plausible that they collided. The three men on board were killed. The body of Bergér's observer, Leutnant zur See Hans-Erich Hirtz, washed up on the Cornish coast. Technically, it was the first confirmed victory for the Whirlwind, and Westland sent No 263 Sqn a case of champagne – an unusual gesture given the death of 20-year-old Plt Off K A G Graham.

Training for aerial combat could kill too. In late April 1941, 5./BoFlGr 196 had to bury Feldwebel Koch and Leutnant zur See Wolrad who crashed their new Ar 196A-3 near Hourtin on the 22nd.

On 19 May, Hurricane I-equipped B Flight of No 87 Sqn, the latter based at Charmy Down, near Bath in Somerset, was detached to St Mary's airport, in the Isles of Scilly, to combat German maritime reconnaissance flights over Britain's southwestern approaches. Plt Off Ivor Badger was scrambled immediately upon his arrival at St Mary's to intercept an enemy aircraft identified as a 'Do 22' or 'He 114' – the RAF's aeroplane recognition handbooks could clearly have done with an update. At 2107 hrs Badger shot down Ar 196A-4 6W+EN. On 5 June another Ar 196A-4 was downed 80 km (50 miles) west of Brest with the loss of its crew whilst on an anti-submarine mission. Not one but two Arados were claimed destroyed that day by a Sunderland crew from No 10 Sqn Royal Australian Air Force (RAAF).

The sinking of the battleship *Bismarck* (see Chapter 4) nine days earlier was little more than a bad day at the Reichskanzlei for the Führer, whose soldiers now 'washed their boots' in the Mediterranean after subordinating the Balkans within a few weeks, and were about to invade the Soviet Union (see Chapter 5). For the relatively small Ar 196 force, this escalation of

the war meant further scattering, however, and the transfer of most of the Luftwaffe's fighter wings to the Eastern Front also made life more difficult for those seaplane elements maintaining their dangerous patrols ahead of the Atlantic Wall.

The invasion of the Soviet Union, codenamed Operation *Barbarossa*, was barely into its third day when 5./BoFlGr 196 again lost a *Staffelkapitän*, this time Oberleutnant zur See Hans Lindemann, who was killed on 25 June when he crashed his Ar 196A-3 near Hourtin following engine failure. His observer survived. By then 1./BoFlGr 196's leader, Major Gerrit Wiegmink, had also departed, having been replaced by Hauptmann Hans-Jürgen Schmidt in May.

On 1 July 1941, Schmidt led a *Rotte* in a submarine hunt from Schellingwoude. His observer in T3+GK was Feldwebel Theodor Harings. T3+LK was also flown by an officer, in this case Oberleutnant Stav, with Oberfeldwebel Stürtz in the rear cockpit. They were returning to base when they saw a four-engined bomber – Short Stirling N6013 of No 7 Sqn – circling slowly northwest of the island of Terschelling. Returning from a daylight bombing raid, its crews (led by Australian Flg Off John Kinnane) had spotted a dinghy containing three fellow British airmen and bravely stayed in the area, along with two other Stirlings, as long as possible while radioing for help.

The floatplanes attacked, Schmidt approaching from below N6013's port side and firing 22 cannon shells and his nose gun from 300 m until just 50 m away, claiming hits. Harings tried to fire his flexible machine gun in passing, but it jammed. The Stirling crew apparently never saw the Arados coming. An instant later, Stav attacked in a dive towards the port side, his 20 mm shells striking the port wing and along the fuselage. He later reported;

'During the first burst, the adversary was diving away, and I gave two more bursts with the cannon and machine gun. Again I observed strikes during both bursts. I was now out of cannon ammo and fired only with the fixed machine gun, chasing the enemy. Closing in on the surface of the water, I saw that the adversary was losing speed significantly, trailing faint smoke.

'When I was out of machine gun ammo I saw two Me 109s passing me from behind on the port side. My observer fired ES flares. I saw one of the fighters going in, but no gunfire. Then my observer reported two other aircraft behind us, but when breaking I saw that they were friendly Me 110s. While we turned away, my observer yelled "It is burning!" I turned towards the adversary again and saw it impacting some 1000 m ahead. I overflew the wreckage but saw no people. During the whole time I never observed an attack by the Me 110s.'

Four Bf 110s from 6./ZG 76 had appeared, and two of their crews claimed to have shot down the Stirling. However, the Luftwaffe debriefers credited it to Stav and his observer only. The other two Stirlings survived attacks by Bf 109s from 1./JG 52, although one of the tail gunners was wounded. The seven crew of N6013 were all killed, paying the ultimate price for trying to save the lives of their colleagues in the dinghy below.

They were the crew of V6258, a Blenheim IV of No 139 Sqn that had been shot down by future JG 52 ace Feldwebel Friedrich-Karl

Bachmann following a raid on the railway marshalling yards at Oldenburg, Germany. The aircraft had been successfully ditched by Sgt Ken Fulton. Following the destruction of the Stirling, the three crew from V6258 were rescued by a *Seenotdienst* He 59 and taken to Schellingwoude.

Crewmen of HSL 108 at Schellingwoude – they are, from second left, Sgt William Hales, LAC Alfred Overill, captain Flg Off W F Jackman, AC2 Edward Dagget and LAC Alfred Raybould. They were captured after Ar 196s of 1./BoFlGr 196 had strafed the 63 ft rescue launch. The boat was put into German service (*NIOD*)

There was no British equivalent of the flying branch of the *Seenotdienst*, and RAF 63 ft high-speed rescue launch HSL 108 that sped out of Gorleston, near Great Yarmouth in Norfolk, that afternoon arrived far too late. At 2040 hrs local time, the launch was spotted northwest of the Dutch island of Texel by a fresh patrol of two Ar 196s. Both sides fired at each other, but the British, Air Gunner AC2 Roger Daggett admitted, did so 'with less accuracy than the Germans, who had soon riddled the boat with machine guns'. The Germans reported trying to bomb the boat, then attacking it with cannon fire, and after 20 minutes smoke was seen and a white seaman's sweater spotted flying from the signal mast.

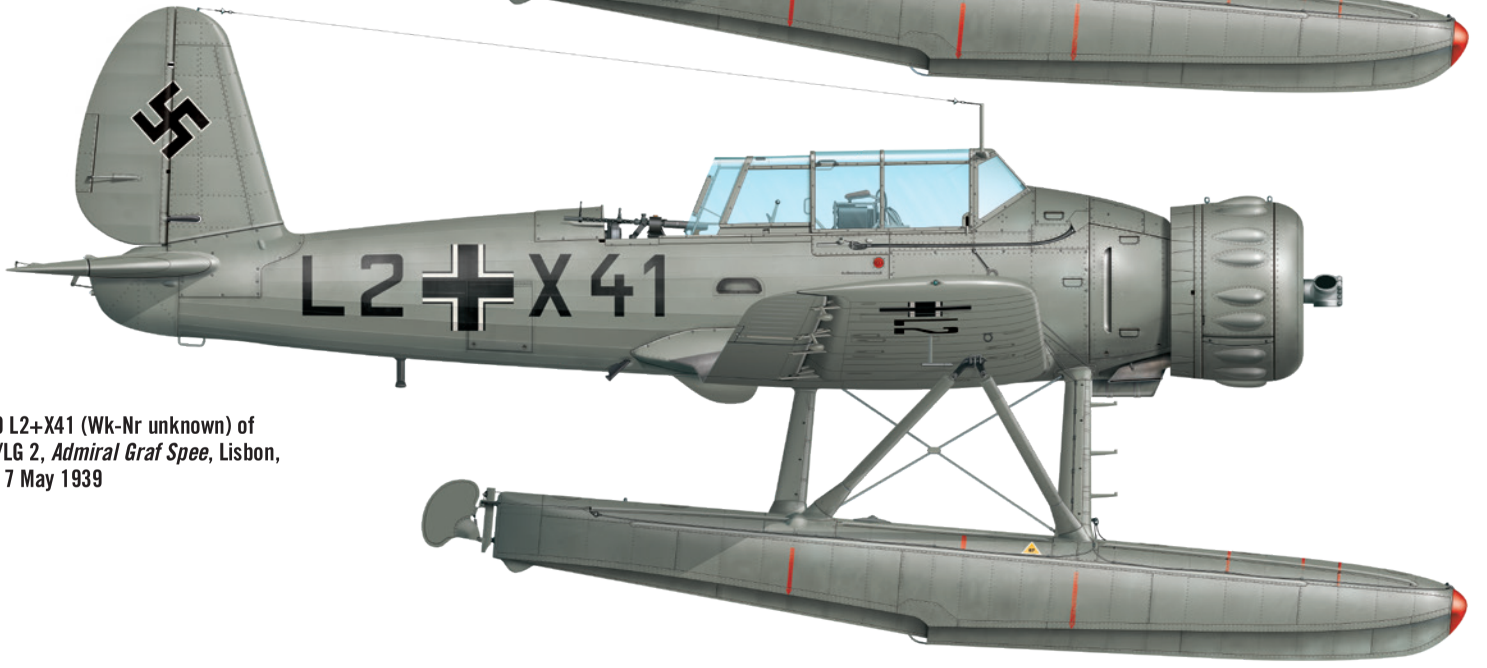
One of the floatplanes landed, and in response to a signal, one of the boat's crew, Peter Drayson, paddled over to the aeroplane in a leaking pram dinghy and was pulled on board. Apparently, the Germans offered to take any wounded, but they could not make themselves understood and the Ar 196s left for Schellingwoude at nightfall. The next morning, another Arado patrol located the wrecked boat and a *Seenot* Heinkel landed to pick up the surviving five crew. Aircraftsman Guilfoyle, shot through the chest, had died during the night and was given a seaman's grave on the spot. The launch was salvaged, repaired and put into German service as an ambulance boat.

While still fulfilling shipboard assignments, 1./BoFlGr 196 also sent coastal flights all over Europe as required. In August 1941, two flights left for the Baltic to join operations against the USSR. Another deployed to Stavanger for a late-summer anti-submarine stint. As the northern winter set in, a few sections migrated to France to support hard-pressed sister *Staffel* 5./BoFlGr 196 in Brest.

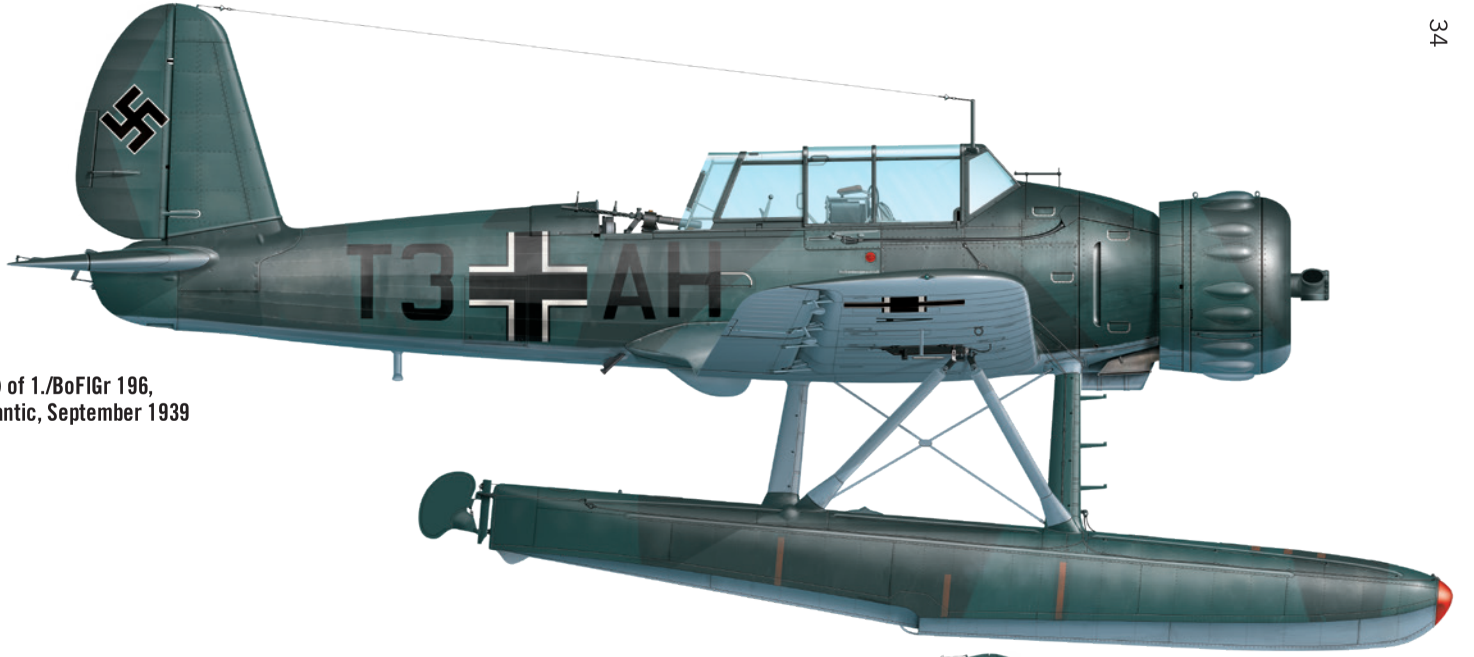
Aircrew shortages were already being felt, apparently, and at least one of two Ar 196s that passed over the Channel after a stop in Schellingwoude on 2 January 1942 was flown by a pilot only – Feldwebel Hilarius Kuhn, who knew he was in trouble when he spotted four Spitfires closing in from behind. Both Arados, identified once again as 'He 114s', were subsequently claimed shot down by the fighter pilots of No 602 Sqn, although the two floatplanes put up 'a good fight'. Actually, only Kuhn's machine was shot down. Moreover, the Spitfire of Norwegian pilot Kaptein Jens Schjelderup Hertzberg was hit, and he did not survive ditching P8722 into the sea off Le Tréport. This was a blow to the Norwegian forces in exile, as Hertzberg had been selected to lead the new No 332 (Norwegian) Sqn.

While the U-boat campaign against Britain's supply lines peaked, RAF Coastal Command gained strength and (*text continues on page 47)*

1
Ar 196A-0 D-IYFS (Wk-Nr 2586) of 10. (*See*)/LG 2, *Gneisenau*, Baltic Sea, Germany, spring 1939

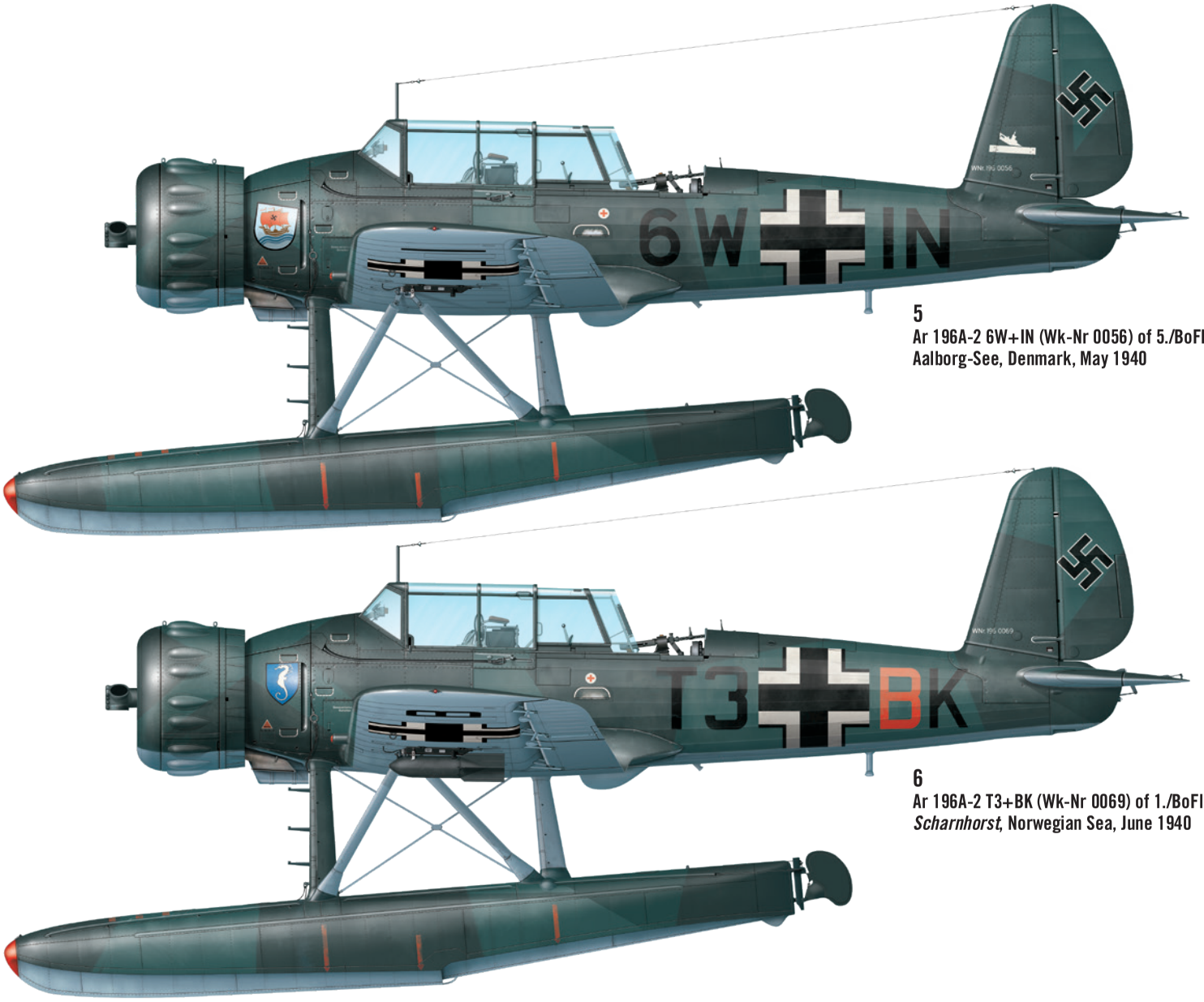


2
Ar 196A-0 L2+X41 (Wk-Nr unknown) of 10. (*See*)/LG 2, *Admiral Graf Spee*, Lisbon, Portugal, 7 May 1939



3
Ar 196A-1 T3+AH (Wk-Nr 0014) of 1./BoFlGr 196,
Admiral Graf Spee, Central Atlantic, September 1939

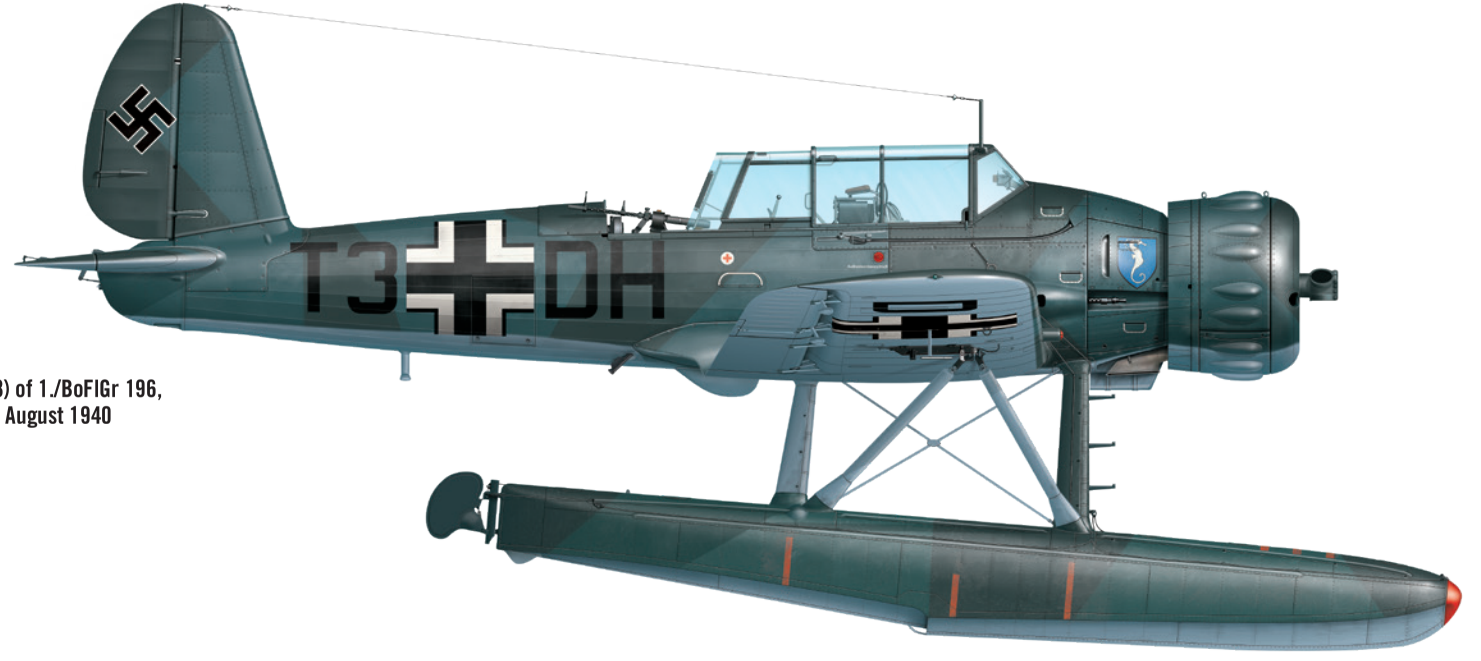
4
Ar 196A-1 T3+AH (Wk-Nr 0014) of 1./BoFlGr 196,
Admiral Graf Spee, South Atlantic, October 1939



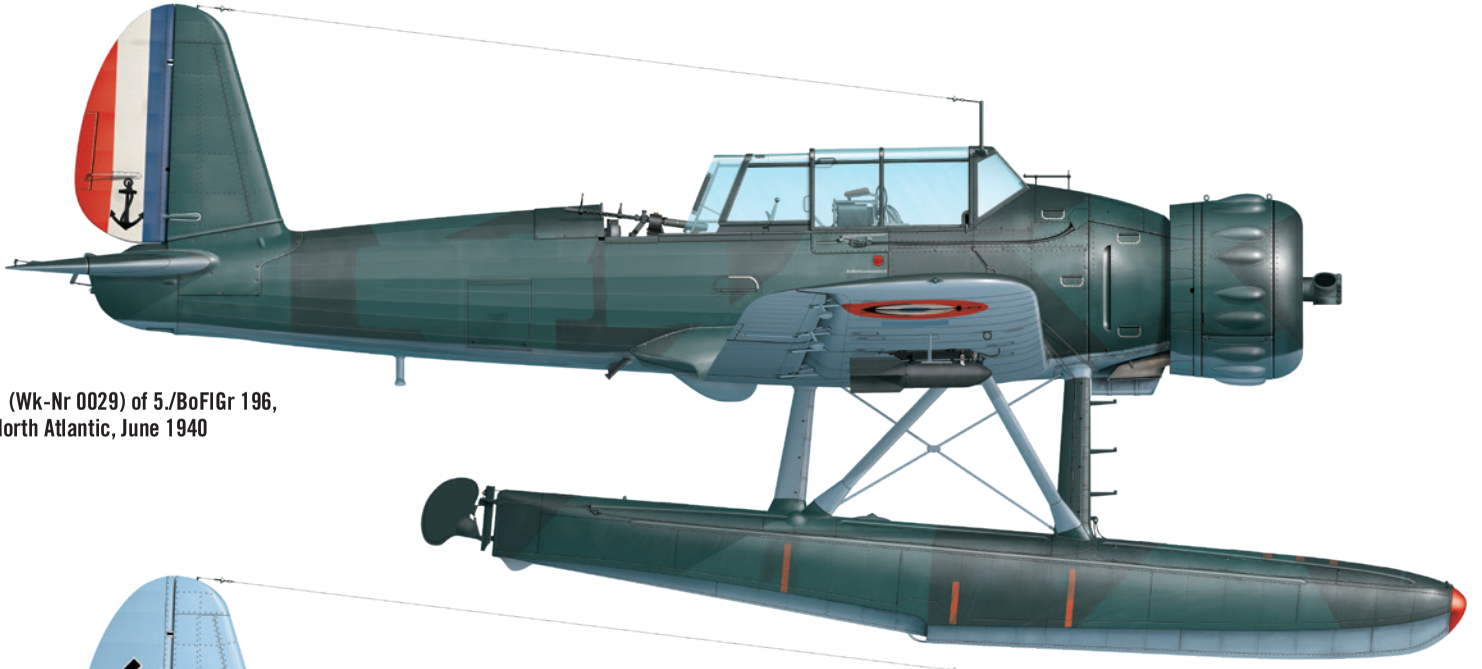
5
Ar 196A-2 6W+IN (Wk-Nr 0056) of 5./BoFlGr 196, Aalborg-See, Denmark, May 1940

6
Ar 196A-2 T3+BK (Wk-Nr 0069) of 1./BoFlGr 196, *Scharnhorst*, Norwegian Sea, June 1940

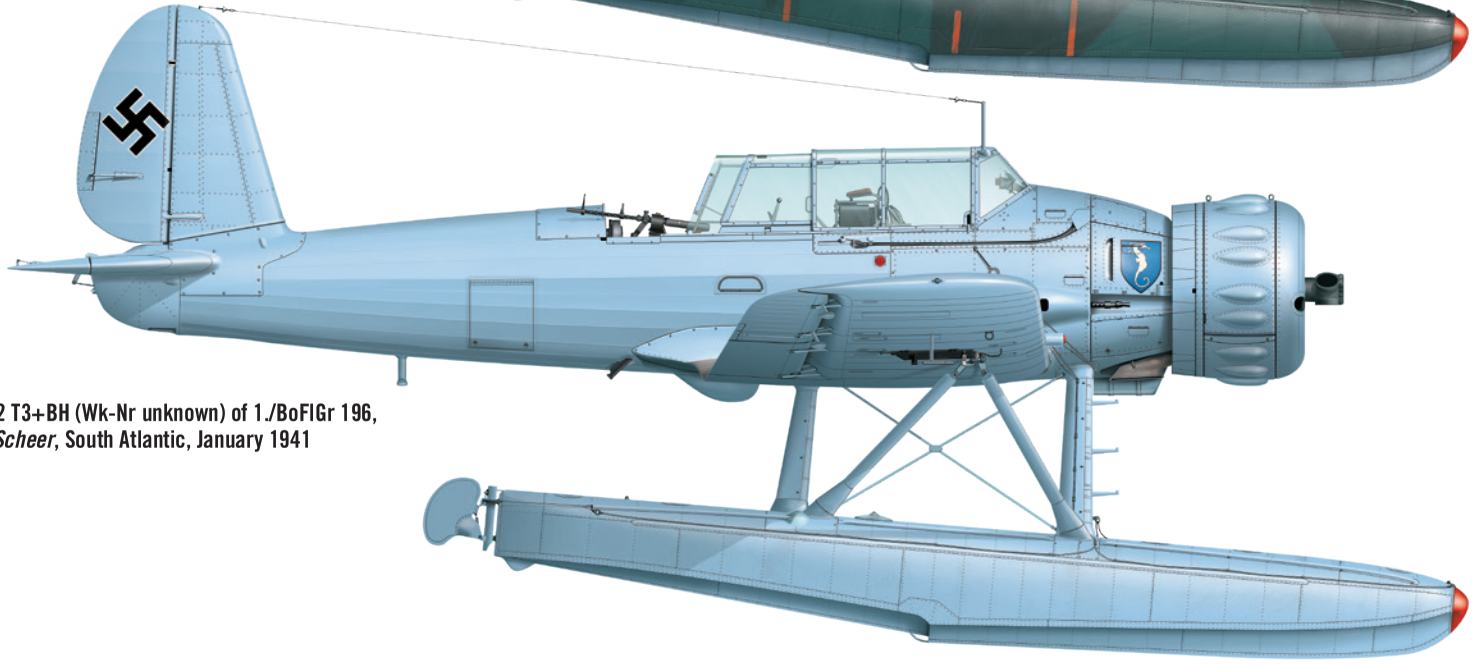
7
Ar 196A-2 CK+FF (WK-Nr 0091), coded 57, of 3./(*Bordflieger*)/
FlErgGr (*See*), Aalborg-See, Denmark, September 1940



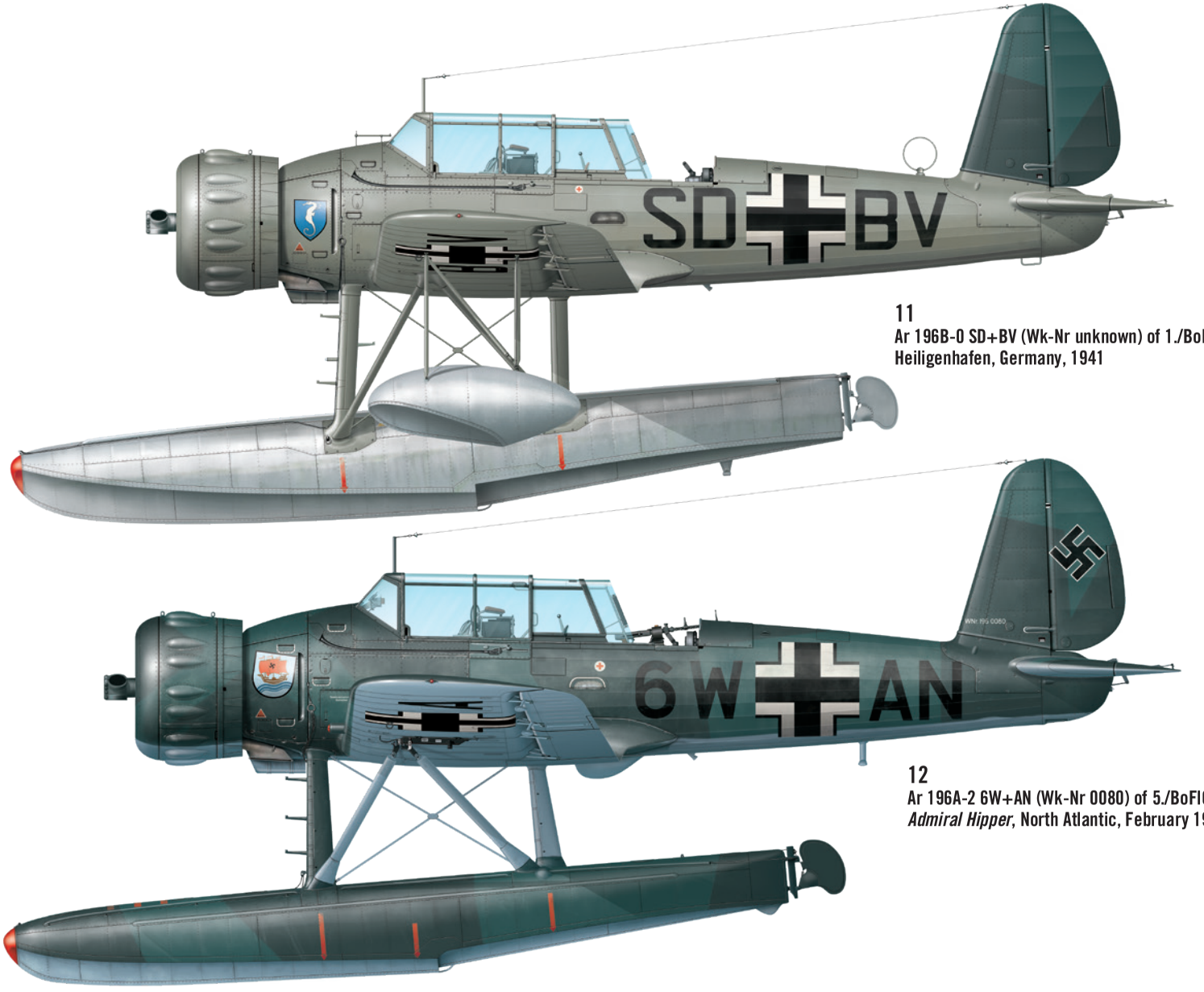
8
Ar 196A-2 T3+DH (Wk-Nr 0068) of 1./BoFlGr 196,
Boulogne-sur-Mer, France, 15 August 1940



9
Ar 196A-1 (Wk-Nr 0029) of 5./BoFlGr 196,
Widder, North Atlantic, June 1940

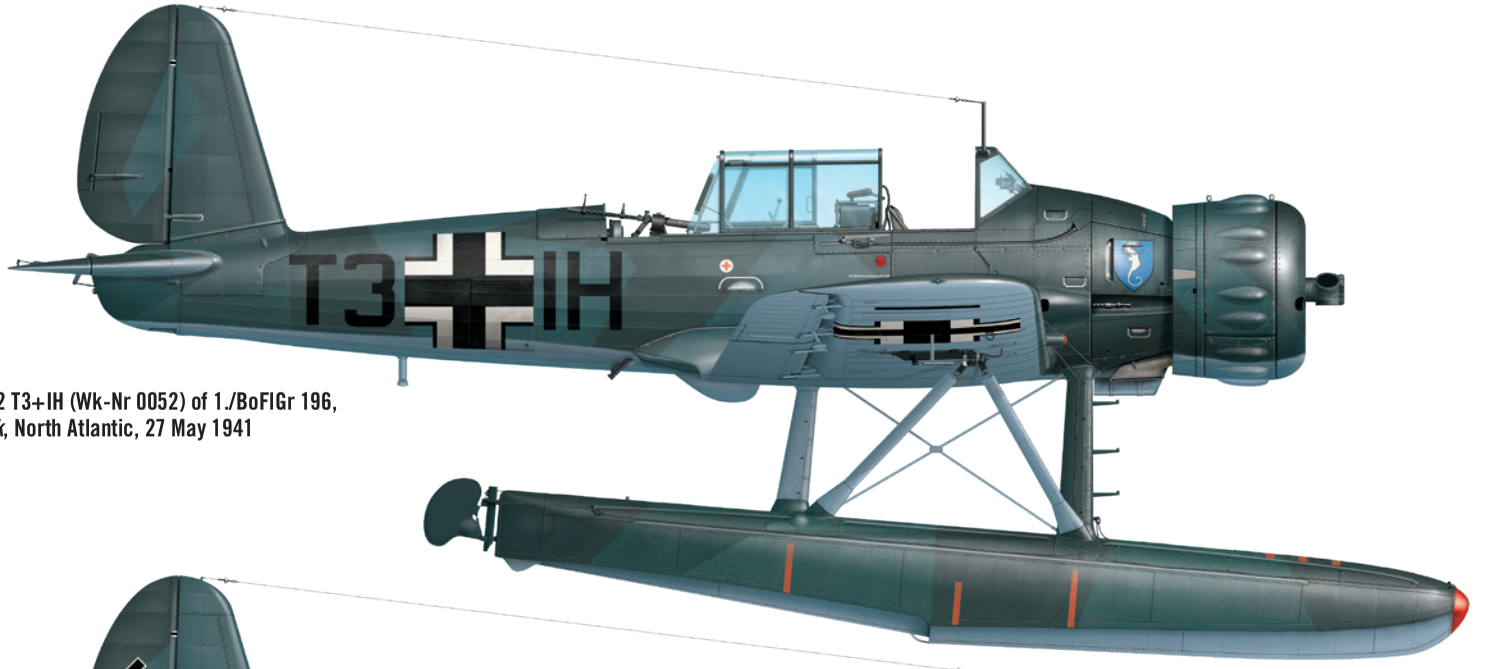


10
Ar 196A-2 T3+BH (Wk-Nr unknown) of 1./BoFlGr 196,
Admiral Scheer, South Atlantic, January 1941



11
Ar 196B-0 SD+BV (Wk-Nr unknown) of 1./BoFlGr 196, Heiligenhafen, Germany, 1941

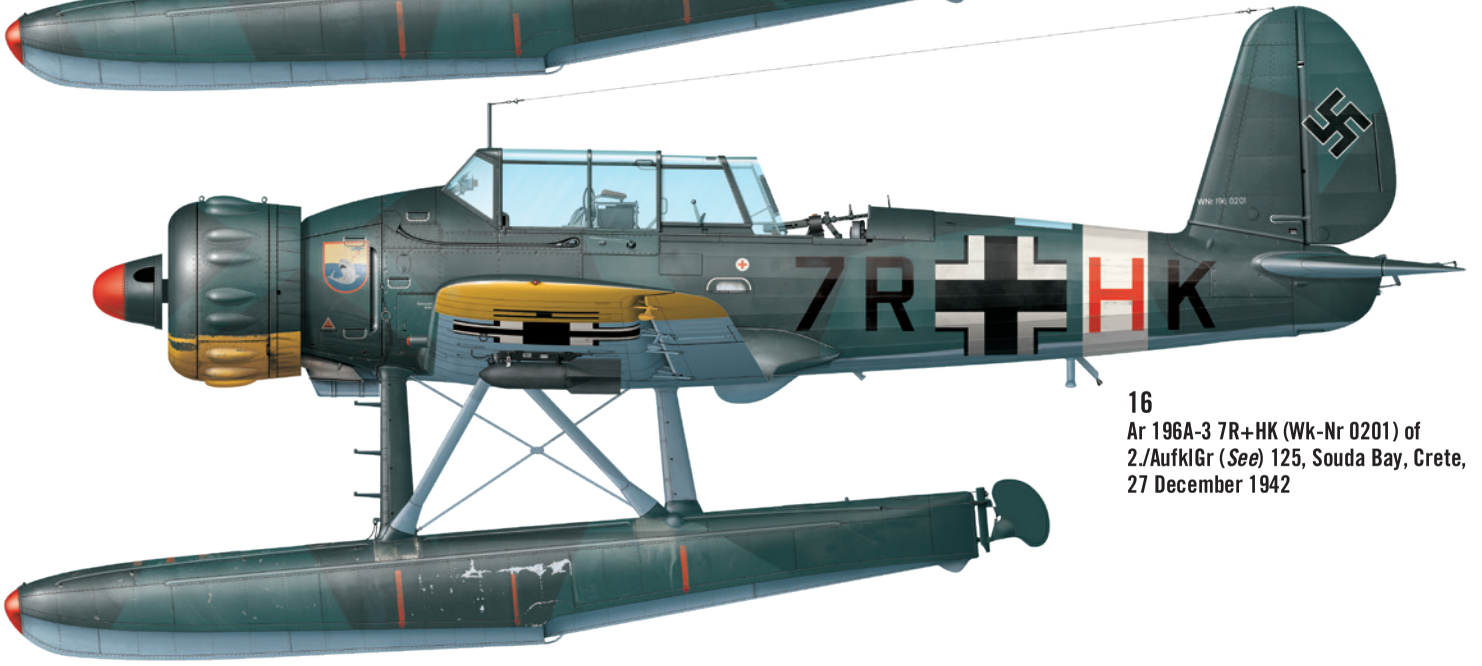
12
Ar 196A-2 6W+AN (Wk-Nr 0080) of 5./BoFlGr 196, *Admiral Hipper*, North Atlantic, February 1941



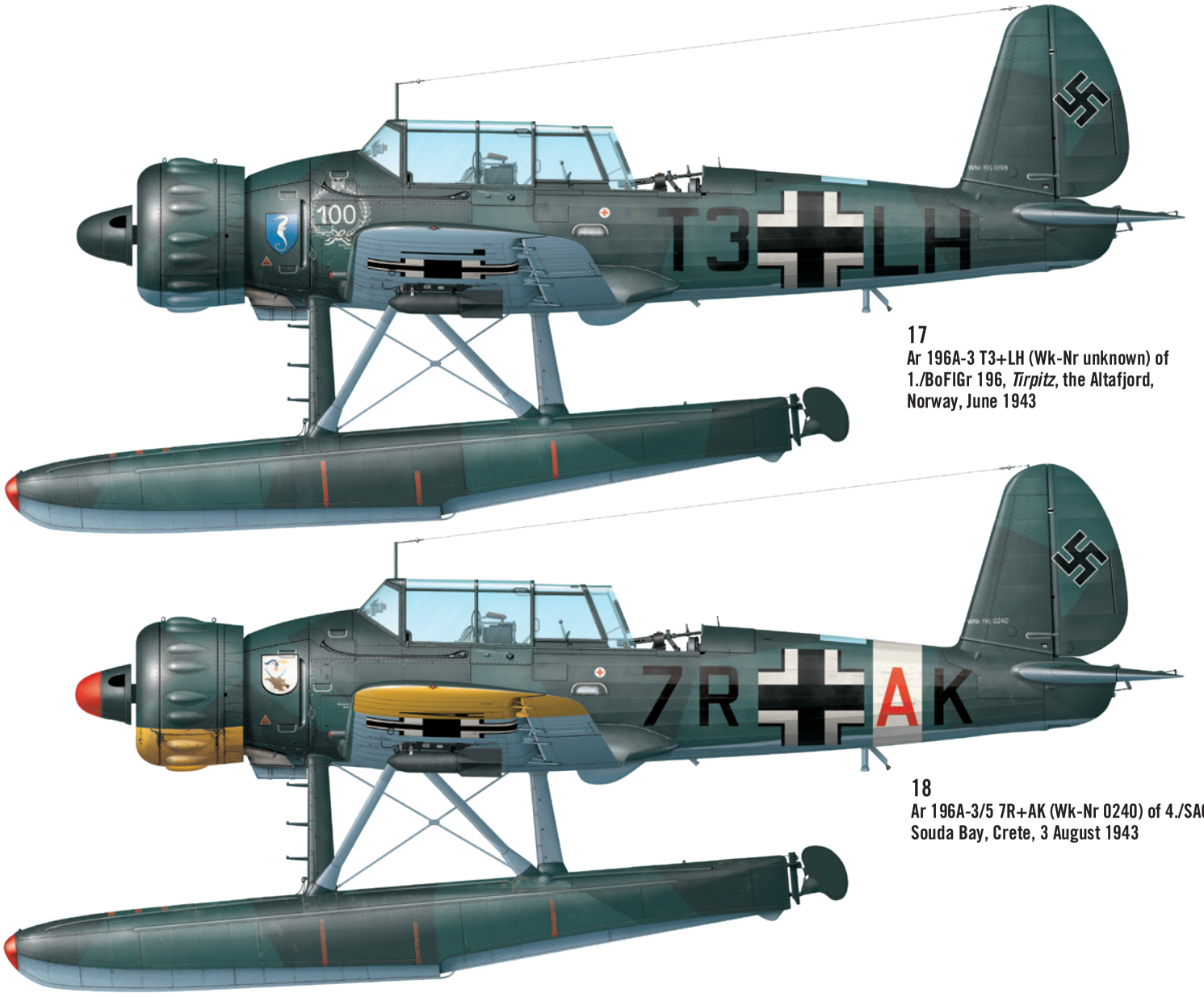
13
Ar 196A-2 T3+IH (Wk-Nr 0052) of 1./BoFlGr 196, *Bismarck*, North Atlantic, 27 May 1941

14
Ar 196A-3 T3+LK (Wk-Nr 0151) of 1./BoFlGr 196, *Prinz Eugen*, North Atlantic, May 1941

15
Ar 196A-3 D1+GL (Wk-Nr unknown) of
3./AufklGr (*See*) 126, Athens-Skaramagas,
Greece, 1942

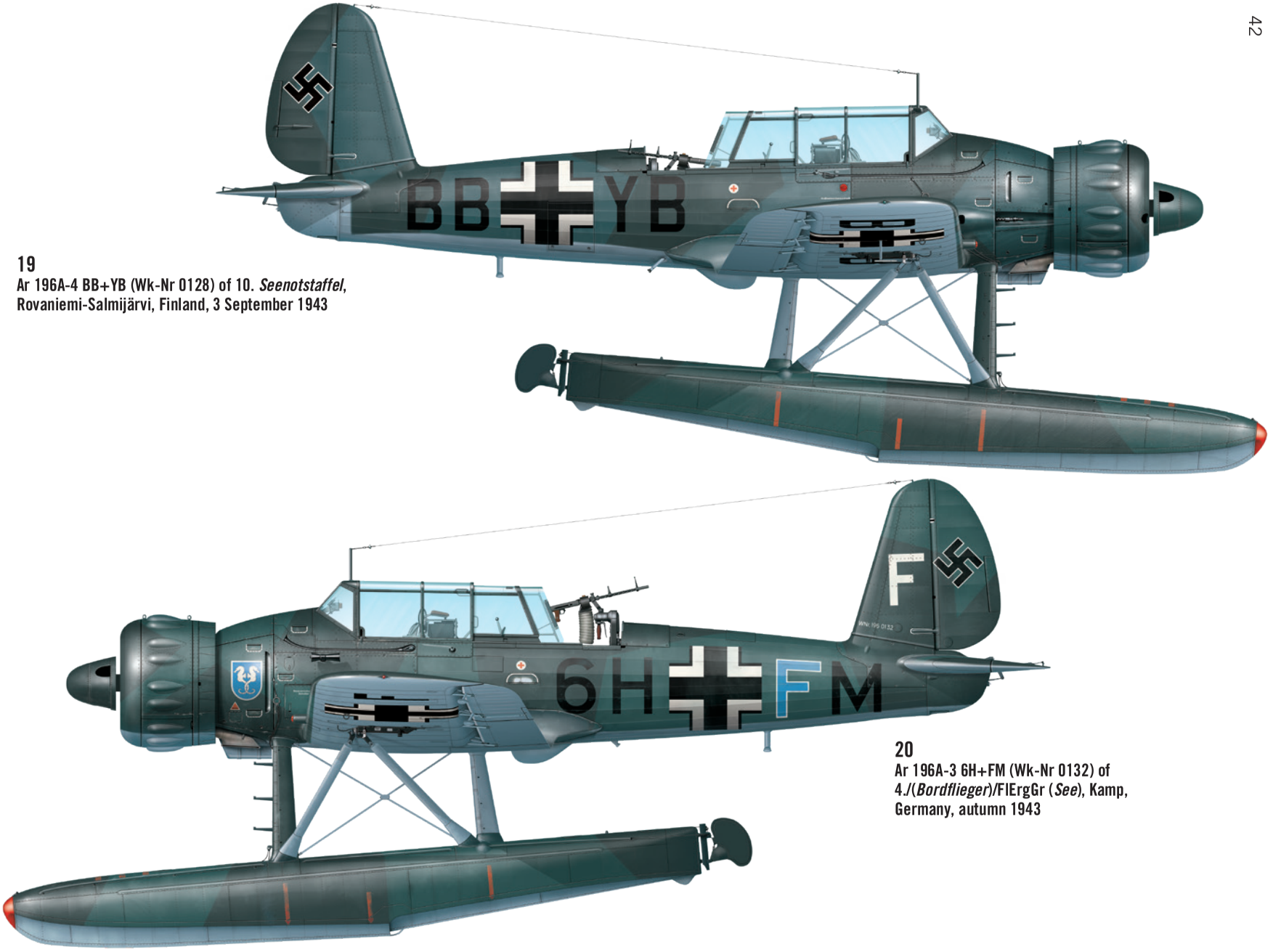


16
Ar 196A-3 7R+HK (Wk-Nr 0201) of
2./AufklGr (*See*) 125, Souda Bay, Crete,
27 December 1942



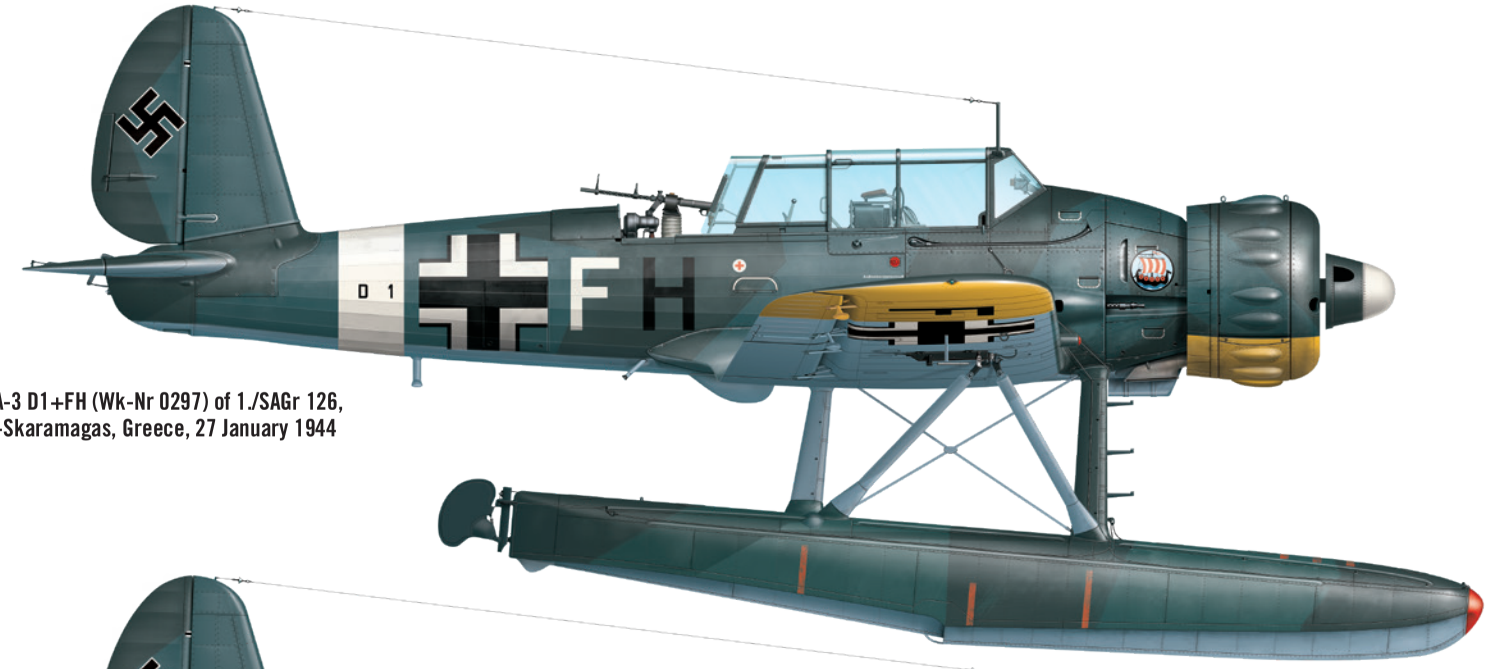
17
Ar 196A-3 T3+LH (Wk-Nr unknown) of 1./BoFlGr 196, *Tirpitz*, the Altafjord, Norway, June 1943

18
Ar 196A-3/5 7R+AK (Wk-Nr 0240) of 4./SAGr 126, Souda Bay, Crete, 3 August 1943

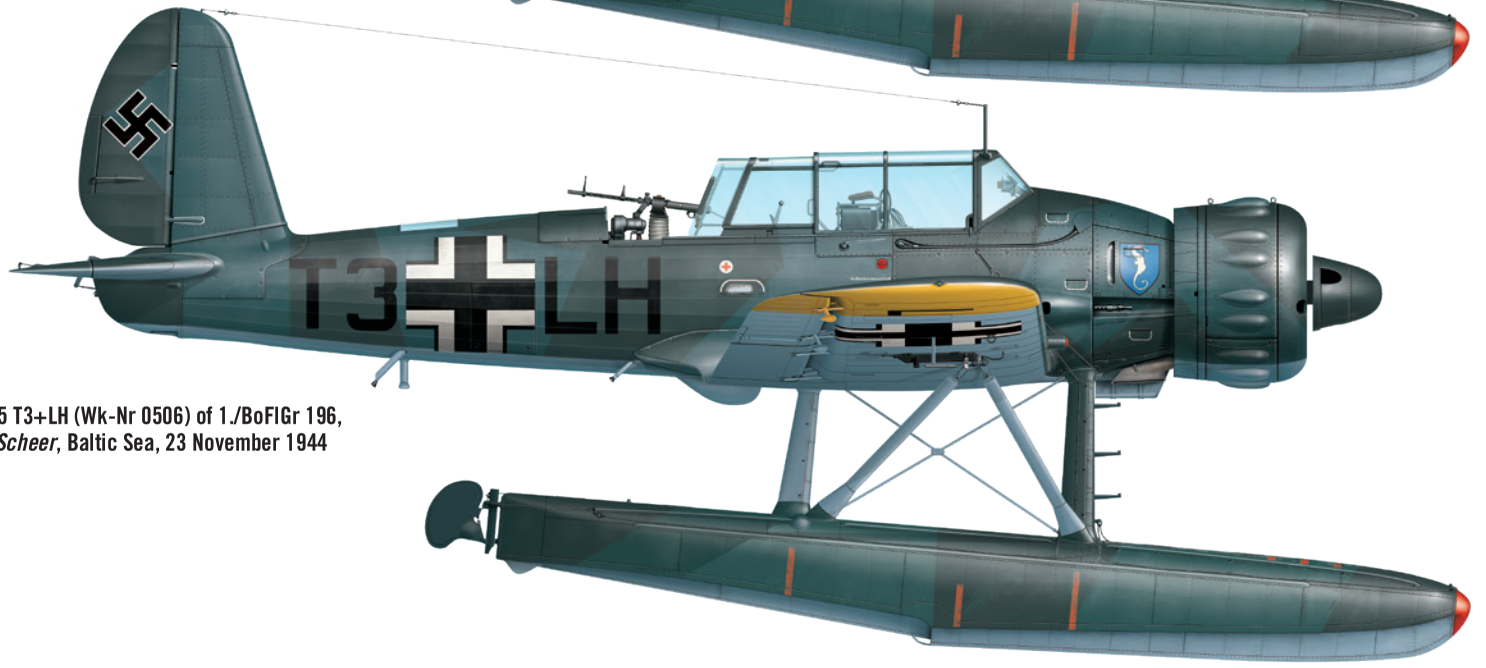


19
Ar 196A-4 BB+YB (Wk-Nr 0128) of 10. *Seenotstaffel*, Rovaniemi-Salmijärvi, Finland, 3 September 1943

20
Ar 196A-3 6H+FM (Wk-Nr 0132) of 4./(*Bordflieger*)/FlErgGr (*See*), Kamp, Germany, autumn 1943



21
Ar 196A-3 D1+FH (Wk-Nr 0297) of 1./SAGr 126,
Athens-Skaramagas, Greece, 27 January 1944



22
Ar 196A-5 T3+LH (Wk-Nr 0506) of 1./BoFlGr 196,
Admiral Scheer, Baltic Sea, 23 November 1944

23
Ar 196A-3 Akula 3/7096 (Wk-Nr 0219) of the Seaplane Yato, Burgas, Bulgaria, summer 1944

24
Ar 196A-3 Akula 2/7096 (Wk-Nr unknown) of the Seaplane Yato, Burgas, Bulgaria, 1945

UNIT BADGES

1
Ar 196A-0 D-IYFS (Wk-Nr 2586) of
10. (*See*)/LG 2, *Gneisenau*, Baltic Sea,
Germany, spring 1939

14
Ar 196A-3 T3+LK (Wk-Nr 0151) of
1./BoFlGr 196, *Prinz Eugen,* North
Atlantic, May 1941

5
Ar 196A-2 6W+IN (Wk-Nr 0056) of
5./BoFlGr 196, Aalborg-See, Denmark,
May 1940

15
Ar 196A-3 D1+GL (Wk-Nr unknown)
of 3./AufklGr (*See*) 126,
Athens-Skaramaga, Greece, 1942

16
Ar 196A-3 7R+HK (Wk-Nr 0201) of
2./AufklGr (*See*) 125, Souda Bay,
Crete, 27 December 1942

18
Ar 196A-3/5 7R+AK (Wk-Nr 0240) of
4./SAGr 126, Souda Bay, Crete, 3
August 1943

20
Ar 196A-3 6H+FM (Wk-Nr 0132) of
4./(*Bordflieger*)/FlErgGr (*See*), Kamp,
Germany, autumn 1943

21
Ar 196A-3 D1+FH (Wk-Nr 0297) of
1./SAGr 126, Athens-Skaramanga,
Greece, 27 January 1944

23
Ar 196A-3 Akula 3/7096 (Wk-Nr 0219)
of the Seaplane Yato, Burgas,
Bulgaria, summer 1944

the danger for the German submariners came increasingly from enemy aircraft. Therefore, what the Kriegsmarine needed from the Luftwaffe in the first place were fighters. But to Göring and his generals, fighter patrols over the Bay of Biscay enjoyed a decidedly low priority. Thus, a lone navy-controlled seaplane unit in Brittany found itself flying increasingly in an air-to-air role, which the Ar 196 was really not up to. Granted, it had effective armament, but the floatplane's top speed of less than 200 mph meant it struggled to catch enemy aircraft. When the 1./BoFlGr 196 detachment left, 5./BoFlGr 196 was concentrated in Brest in late April 1942, to allow missions to be flown in larger formations. That spring and summer, its crews were credited with no fewer than 12 aerial victories in Ar 196s, although only a handful of these can be substantiated.

On 23 April, an Arado met another Sunderland of No 10 Sqn and made several attacks, with very little consideration apparently for the Short flying boat's 'Flying Porcupine' reputation. None of the Australian crew was injured and W3994 got home safely, although quite a few hits had damaged two of the engines, oil tanks and the starboard fuel tank, and punched several holes in the fuselage and tailfin.

During the night of 3/4 June, *Luigi Torelli* (one of a number of Italian submarines operating out of Bordeaux) became the first such vessel to be attacked by a Vickers Wellington with the aid of the new Leigh searchlight. After emergency repairs in Avilés, Spain, the damaged boat was attacked by a Sunderland of No 10 Sqn on 7 June. A second aircraft from the squadron, W4019 captained by Flt Lt Yeoman, joined the action and forced the submarine to be beached at Santander, on Spain's north coast. The Italian crew subsequently managed to refloat the vessel and sail it back to Bordeaux. Heading for home, Yeoman's flying boat was attacked by an Arado, but neither aircraft was seriously damaged.

No 10 Sqn and 5./BoFlGr 196 clashed again two weeks later on 21 June, and this time the Germans inflicted the RAAF's first fatal loss of a Sunderland in combat. W3999 was coming to the rescue of a ditched Wellington when an Ar 196 attacked the aircraft and scored a number of hits with its cannon. The No 3 engine belched smoke and the Sunderland began to lose altitude until it alighted on the water. Moments later the flying boat exploded and immediately sank, taking the 11-man crew (led by Flt Lt 'Buck' Judell) with it. The attack was witnessed by the crew of an accompanying maritime patrol Armstrong Whitworth Whitley, which then became the target of the aggressively flown German floatplane. The Coastal Command pilot managed to take evasive action and escape. Four days later, a 5./BoFlGr 196 Arado crashed because of pilot error during a bombing training flight near Lanvéoc, the two crew losing their lives.

On 6 July, a Whitley from No 502 Sqn was attacked by an Arado and slightly damaged. That evening, an Ar 196 attacked a Wellington of No 304 (Polish) Sqn, Z1112 making it back to base with holes in the fuselage. A week later, on the night of 14/15 July, a Leigh Light-toting Wellington of No 172 Sqn undertook a long night mission. Towards the end of the sortie, after nine hours in the air, and 322 km (200 miles) from the Isles of Scilly, the crew spotted two Arados 800 m away at low level in the early morning light. The seaplanes carried out a frontal attack,

which damaged the Wellington's ailerons and wounded the radio operator. According to its crew, the attack was repulsed, with one of the Ar 196s trailing flames and smoke. No loss is listed in German records, however. The badly damaged Wellington, on the other hand, veered off the runway and crashed when landing at Portreath, in Cornwall. The aileron damage had made it untrimmable, and one of the main undercarriage legs had also failed to deploy. Two crewmen died of their wounds shortly thereafter.

On 28 July, it was Czech-manned Wellington DV507 of No 311 Sqn that battled a *Rotte* of Ar 196s over the ocean southwest of Brest. Although one of the attackers was claimed shot down by the crew of Sergeant Vladimír Šponar, little harm seems to have actually been done to the Arados.

Two days later, Sunderland T9111 of No 461 Sqn RAAF was dropping leaflets to French fishermen when, in the early evening, it was attacked by three Ar 196s. During the ensuing fight, the Sunderland crew saw a U-boat that seemed to be stationary in the water, but they were unable to take action against it, and when the flying boat's pilot dropped his bombs, it was only to lighten his aircraft. One Arado was claimed shot down, but there were no losses and the German floatplane crews had successfully protected a U-boat in trouble.

On 6 August, two Ar 196s joined a Ju 88 in attacking No 461 Sqn Sunderland T9085, although the German aircraft soon withdrew. The flying boat then landed in the open sea to rescue six survivors from a ditched Whitley. Six days later, Sunderland T9090 of No 461 Sqn was less fortunate when attempting to alight in a heavy sea near a dinghy containing the six crew of a ditched Wellington due west of Brest. The flying boat crashed and ten crew lost their lives. Navigator Flg Off John Watson managed to reach a spare dinghy that had earlier been dropped by a Whitley for the Wellington crew.

The next day, two Whitleys searching for the survivors were also lost, Z9300 suffering an engine failure and Z9461 being shot down shortly thereafter by two Ar 196s. Its crew reported to be under attack by German floatplanes, and were duly listed as missing in action.

The survivors from the Wellington and the Sunderland spent five more nights in their dinghies, the weather having deteriorated to the point where a rescue could not be safely attempted. On the 18th, the Wellington crew paddled over to Watson, directed by a Beaufighter crew. The next day, the seven men were finally rescued by a Royal Navy motor launch, but not before a German vessel, escorted by three or four Arados and two Fw 190s, had been repelled by Beaufighters. The crew of Whitley Z9300 were also rescued.

Both the Focke-Wulf Fw 190 and the Bristol Beaufighter were new types over the Bay of Biscay. 5./BoFlGr 196 had, in fact, already

An Arado *Rotte* of 1./BoFlGr 196 liaised with an Italian submarine based in Bordeaux. A propaganda photographer was on board the vessel, and he took several shots of the seaplanes as they taxied past (*Horizonten*)

A close-up taken from the Italian submarine of one of the taxiing Ar 196A-3s from 1./BoFlGr 196. Note that the fuselage and wing *Balkenkreuz* applied to 6W+ON differ in style with respect to the thickness of their white flanks. The markings on the wings had previously been used in all six regular positions on the airframe prior to July 1939 (*Horizonten*)

experienced the deadly effectiveness of the latter type when, on 5 August, pilot Oberfeldwebel Jox and his radio operator Feldwebel Krüger were listed as missing in action after two Beaufighters of No 235 Sqn jumped two Arados west of Ushant Island and downed 6W+XN. The victorious pilot, Plt Off Edward Neal, and his gunner, Sgt Woodcock, then made no fewer than 20 passes at the second Arado. Thanks to the unnamed pilot's wild manoeuvring, it managed to escape when the Beaufighter's ammunition ran out.

On 17 August, an Arado fatally crashed when landing at Brest after a mission. It had probably been damaged by Beaufighters, No 235 Sqn having encountered two Fw 190s and three Ar 196s trying to protect a small boat. Exactly two weeks later, Plt Off Neal claimed two more enemy aircraft shot down following a clash with three Arados. In fact, the Germans suffered only one loss, Ar 196A-3 6W+QN, which was probably the victim of air combat 230 km (143 miles) west of Brest.

The Arado pilots routinely took on the Beaufighter VIC, which was essentially a fighter and more than 160 km/h (100 mph) faster than their draggy seaplanes, with some confidence, as this entry in the No 235 Sqn operations record book reveals;

'6/9/42. Interceptor patrols by P/O Caroon in D, F/O Wilson in K. K sighted four Ar 196s, flying in two pairs, the first at 400 ft. K attacked the first pair, damaging the port wing on one Arado. The second pair dived on K, and was joined by a third pair, previously unnoticed. All Arados then climbed into the cloud, followed by K, but nothing further was seen of them.'

On 29 September, three Arados were chasing a Whitley when two No 235 Sqn Beaufighters appeared. One Ar 196A-3 was forced to land in the Bay of Lampaul on Ushant Island after being seriously damaged. On 26 November, four Beaufighters from the same squadron attacked a formation of six Ar 196s, with Oberfeldwebel Walter Heeg and Leutnant zur See Werner Paysen being shot down by Plt Off Gerald Leahy.

What was probably 5./BoFlGr 196's last aerial victory with the Arado, and an atypical one at that, occurred on 29 January 1943 at 1434 hrs when Oberleutnant Heinz Wurm shared in the destruction of a No 226 Sqn Douglas Boston medium bomber with a flak battery. The latter had hit the aircraft when it targeted the Morlaix railway bridge.

In March 1943, the 'embarked air squadron', as 5./BoFlGr 196 was still designated, was partly equipped with Fw 190A-5 fighters fitted with two 300-litre drop tanks to take on Coastal Command aircraft over the Bay of Biscay under the leadership of Oberleutnant Wurm. Ju 88 heavy fighters of V./KG 40 and, later, ZG 1 joined this effort. The seaplane element of 1./BoFlGr 196 continued in its proper maritime reconnaissance role, however, faring a lot better in terms of combat losses now that it was no longer engaging Beaufighters.

6W+NN of 5./BoFlGr 196 is recovered after another anti-submarine patrol. The defensive armament in the rear cockpit has been doubled here in a field modification as an alternative to the factory-mounted MG 81Z of the Ar 196A-5 (*Horizonten*)

5./BoFlGr 196 became 1./*Seeaufklärungsgruppe* (SAGr – Sea Reconnaissance Group) 128 in May 1943, and it initially had 17 Ar 196s and six Fw 190s on strength. Soon, most of the floatplanes were transferred to a new sister *Staffel*, 2./SAGr 128, which moved to St Raphaël and Étang de Berre, on the French Mediterranean coast (see Chapter 5). 1./SAGr 128 was renamed *Jagdkommando* 1./SAGR 128 in January 1944. Near Bordeaux, Ar 196s were also found at the former civilian seaplane terminal on Lake Biscarosse during the winter of 1942-43. These were training aircraft of the seaplane weapons school at Parow, however, escaping the frost in Germany.

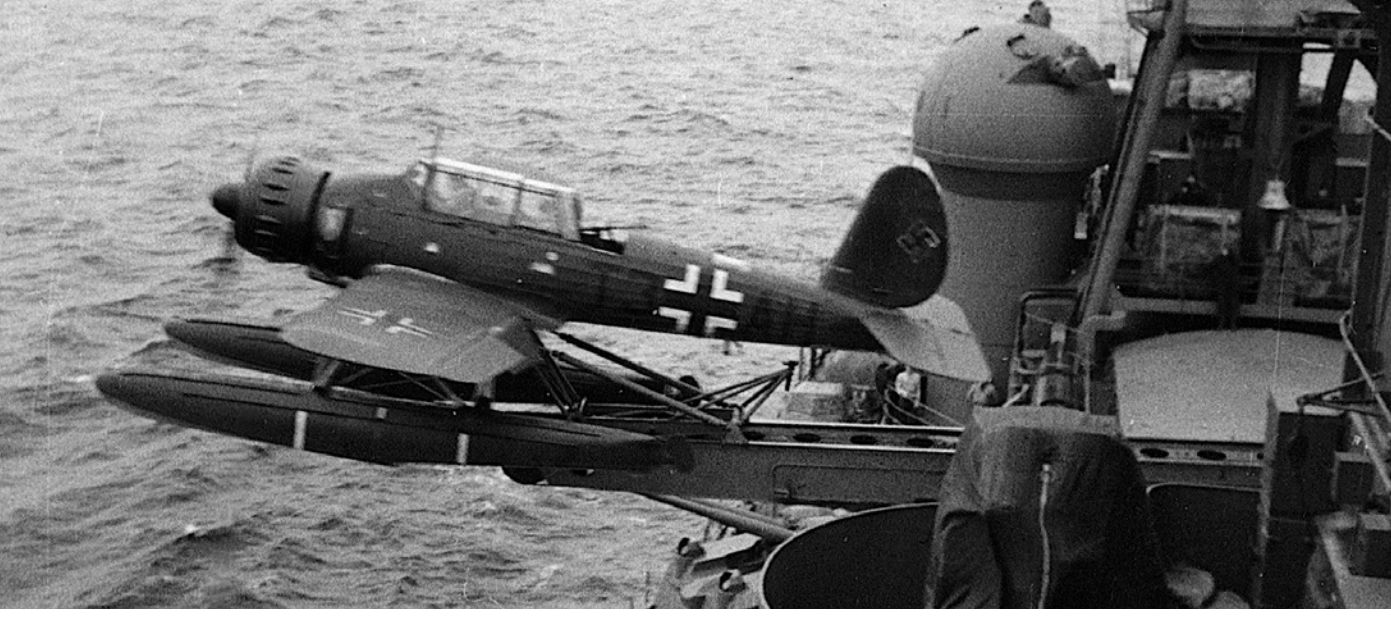
In Denmark, the inventory of 1./KüFlGr 706 stood at ten He 115s and just two Ar 196s, plus two Fieseler Storchs, in March 1942. The unit's reliance on the Arado increased when it exchanged the Heinkels for a handful of Blohm & Voss BV 138 flying boats. The unit transferred from Aalborg to Stavanger in September. Meanwhile, the Luftwaffe was moving to take over the units controlled by the Kriegsmarine, as it had already done with 5./BoFlGr 196 in France, and in the summer of 1943 1./KüFlGr 706 became 2./SAGr 131. It had five BV 138s and five Ar 196s on strength in October.

2./KüFlGr 406, based at Trondheim and Alesund, was redesignated 1./SAGr 131. Just like its sister *Staffel*, it operated BV 138s, but also had a so-called Arado-*Kette* for inshore patrol and convoy escort duties. It was intended that each BV 138 unit in Norway would have one or two Arado flights, including SAGr 130 in the extreme north. This was never realised, however, and 1./SAGr 131 was sent to the Black Sea with only BV 138s in January 1944.

In the extreme north of Norway, some Arados did appear on the books of the *Seenotdienst* unit in Kirkenes for the so-called *Sumpfnotdienst* (swamp rescue service). They were usually found across the border in northern Finland, supporting the German Lappland Army (see Chapter 5).

In addition to these units, shore-based detachments of 1./BoFlGr 196 were sent to Norway at various times, and Ar 196s assigned to the Kriegsmarine's increasingly immobile warships were also present in the country. 1./BoFlGr 196's headquarters moved from Wilhelmshaven to Aalborg on 6 March 1943. The inter-service wrestling between the air force and the navy probably explains why 1./BoFlGr 196 was an unusually large *Staffel* with up to 38 aircraft, assigned shore-based coastal reconnaissance duties in various parts of Europe in addition to its embarked core business – it was the only unit the Luftwaffe could not reasonably claim!

When 5./BoFlGr 196 lost its embarked air squadron status, 1./BoFlGr 196 inherited the Ar 196s still on board the merchant raider *Michel* (see the next chapter). This helped make 1./BoFlGr 196 perhaps the most globetrotting aircraft unit of any nation in World War 2, having flown its Ar 196s everywhere from the Baltic, the French west coast and the Mediterranean to the South Atlantic, the Barents Sea and the Pacific Ocean.



Ar 196A-3 T3+AH (Wk-Nr 0149) is catapulted from the heavy cruiser *Prinz Eugen* in 1943. This was a training launch in the Baltic Sea (*Horizonten*)

CHAPTER FOUR

THE SEVEN SEAS

Norway under German rule was a dream come true for the Kriegsmarine – admirals and architects were busily drawing up plans to base the world's mightiest fleet in the fine natural harbour of the Trondheimfjord, in a new German city to be named Nordstern. Ironically, the navy had ended the Norwegian campaign with just one large warship, *Admiral Hipper,* still in working order. *Lützow*, *Gneisenau*, and *Scharnhorst* were all under repair, *Admiral Scheer* was still under refit and the new battleships *Bismarck* and *Tirpitz,* as well as the heavy cruiser *Prinz Eugen*, were still not in service.

To add to the menace of its U-boats, the Kriegsmarine did have another card up its sleeve in the form of its auxiliary cruisers, or merchant raiders. Ten such ships, converted freighters, were sent out between March 1940 and January 1943 and, although most of them never came back from their first cruise, they were quite effective, sinking hundreds of thousands of tons of shipping while keeping Allied forces busy on the seven seas.

The stuff of movies, these ships were disguised as normal merchantmen from neutral countries. They carried large quantities of paint and materials, and even costumes, for their crew to frequently alter their silhouettes and appearance. When they encountered a prey, however, they ran up their battle flags like real pirate ships, and pulled down the false structures and props that hid their large-calibre guns.

All these ships carried a seaplane for reconnaissance, hangared and hidden in a converted cargo hold, and often a spare aircraft. They did not have catapults. Aeroplanes and crews came from 5./BoFlGr 196, the latter dressed in blue flight suits according to a December 1939 instruction. Seven ships set out during the course of 1940.

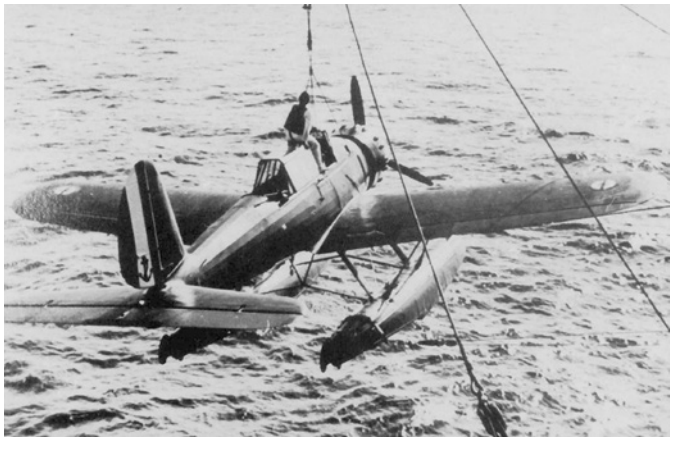
Atlantis was the first merchant raider to sail, just before the Norwegian campaign in March 1940. It spent a whopping 601 days at sea, sinking 22 ships. The vessel initially carried two He 114s, whose aircrew, Oberleutnant Borchert and Leutnant zur See von Bulla, pioneered the use of the so-called *Seilbombe* ('cable bomb') to tear the aerials off the masts of target ships to prevent them from transmitting warning signals. The 'cable bomb' was simply a sharp steel cable with a small weight at the end, reeled out from an aluminium tube under the fuselage by the observer.

Both Heinkels had been wrecked by January 1941, and the ship's captain, Kapitän zur See Bernhard Rogge, complained of their uselessness in any swell. Indeed, he stated that Ar 196s should have been embarked instead. Rogge eventually received three crated Ar 196s from the supply ship *Alsterufer* in the middle of the South Atlantic in April 1941. Interestingly, assembly instructions were not included in the crates. Nevertheless, *Atlantis*' crew managed to have an Arado flyable within five days. It crashed in September, and the floatplane's replacement suffered a similar fate on 21 November 1941. The following day, whilst still in the South Atlantic, the raider was surprised and sunk by the heavy cruiser HMS *Dorsetshire* – a fate which might have been prevented had the Ar 196 not been out of action.

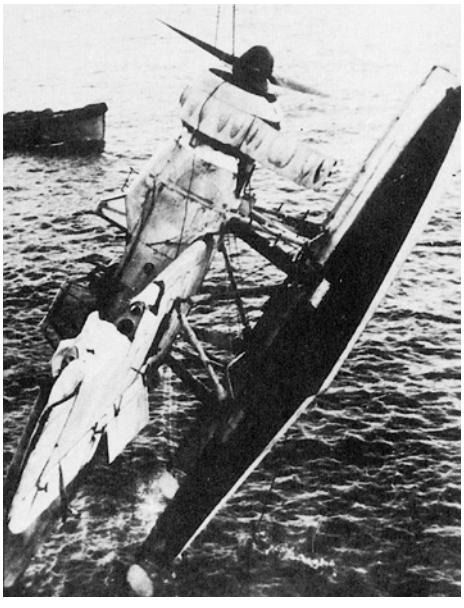
Orion sailed in April 1940 and spent 510 days at sea, sinking 16 ships. Originally, it carried one Ar 196A-1, which crashed in June 1940. On 3 February 1941, a replacement was delivered by the supply ship *Münsterland* in the form of a Nakajima E8N 'Dave' floatplane bought by the highly active German naval attaché to Japan, Admiral Paul Wenneker. Soon, *Orion*'s chief pilot, Oberleutnant zur See Klaus von Winterfeld, and his men had converted themselves to the unfamiliar biplane, despite no one on board *Orion* speaking any Japanese.

Ironically, the ship had actually been disguised as a Japanese merchantman, with random kanji characters painted on the hull copied from a film roll wrapping and proclaiming 'Not suitable for use in the tropics'! The E8N was duly painted in *British* markings. As noted in Chapter 1, the aircraft was judged to be more seaworthy than the Ar 196, *Orion*'s captain, Korvettenkapitän Kurt Weyher, calling the Arado 'totally unsuited for operations on the high seas'. The Nakajima did not last long either, though, crashing off Madagascar in May 1941.

Meanwhile, a fresh Arado had been transferred from the supply ship *Alsterufer*, which was carrying a total of five Ar 196s. Quickly repaired after an accident in July, this aircraft helped *Orion* to make it back to Europe – the



The Ar 196A-1 of the raider *Widder* wore full French naval markings. None of the auxiliary cruisers had a catapult, and the water take-offs increased the scope for mishaps (*Horizonten*)



The crashed Ar 196 from the raider *Komet* is fished out of the Pacific on 2 October 1940. Observer Hans Lindemann was seriously injured in the incident and sent home via Japan. The Arado is painted pale blue, which became more or less the standard colour for merchant raiders. The wreck was used to repair the aircraft on board *Orion,* with a Japanese E8N 'Dave' eventually being bought for that ship instead (*Horizonten*)

vessel put in at Bordeaux on 22 August 1941. Flown to the nearby seaplane base on Lake Hourtin, the Arado, which was painted pale blue, was retired to the Berlin aviation museum as an interesting artefact of the early Millennial Reich, only to be destroyed there by Allied bombing.

Widder sailed in May 1940 and spent 178 days at sea, sinking ten ships. It carried one Ar 196A-1, which was damaged beyond on-board repair on 24 June. This aircraft wore false French naval markings. The ship made for home with engine problems and put in at Brest in October 1940.

Thor sailed in June 1940 and spent 329 days at sea, sinking 12 ships, including a British auxiliary cruiser. It too carried just one Ar 196A-1. Kapitän zur See Otto Kähler's raider managed to return to Germany in April 1941.

Pinguin also sailed in June 1940 and spent 320 days at sea, sinking 32 ships. It originally carried two He 114s, one of which crashed in September 1940. An Ar 196A-1 was received from the supply ship *Alstertor* – not to be confused with *Alsterufer* – in March 1941. It was used to replace the surviving He 114. The *Seilbombe* was reportedly employed by *Pinguin*'s aircrew. The most successful raider of the war was sunk by the heavy cruiser HMS *Cornwall* in the Indian Ocean on 8 May 1941.

Komet sailed in July 1940 and spent 511 days at sea, sinking six ships. Uniquely, the vessel reached the Pacific via the Arctic, assisted by hired Soviet icebreakers. It carried one Ar 196A-1, which reportedly had A-2 wings and was named *Spatz* (sparrow). The floatplane crashed off the Caroline Islands in the western Pacific in October 1940. The injured observer, Oberleutnant zur See Hans Lindemann, travelled home via Japan and the USSR. Perhaps because the ship was now without an aviation officer, *Komet* did not receive a replacement aircraft. The raider still managed to make it back to Germany in November 1941.

Kormoran sailed in December 1940 and spent 351 days at sea, sinking 12 ships. It carried two Ar 196A-1s, one of which crashed on 29 December. A fresh Ar 196 was received from the supply ship *Alsterufer*. *Kormoran* went down off the Western Australian coast on 19 November 1941 following a battle in which it sank the light cruiser HMAS *Sydney* – all 645 crew on board the Australian vessel perished.

Joining the raiding efforts in October 1940 was the former pocket battleship *Admiral Scheer*, refitted and now finally ready for its first mission of the war. On this raiding voyage the ship carried one Ar 196A-2. After some inclement weather in the North Atlantic, the observer and aircraft commander, Oberleutnant zur See Ulrich Pietsch, decided on 5 November that conditions had improved enough for his pilot, Feldwebel Wilhelm Gallinat, to land, and thus, to fly;

'Gallinat has started the engine, it revs up with a deep growl. The ship turns to launching course. All instruments are checked once more. Then I give Gallinat a sign for take-off. He raises his hand, and I can see the catapult lever going into launch position. A second later a rough jerk in the shoulder harness is felt, but then we already soar free from the ship, and low down we fly a wide loop around the ship to say goodbye.

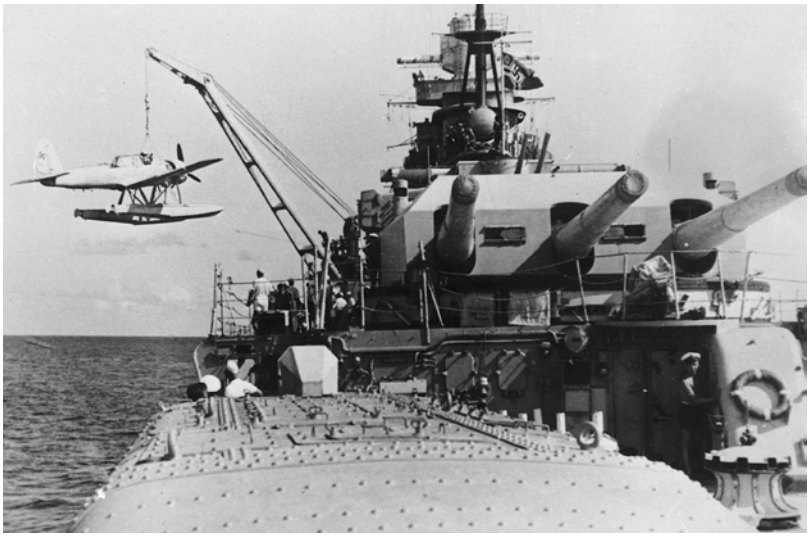
Then begins my job of navigating precisely, and to know at any time where our ship is and where we are.'

They were immediately successful, discovering the British convoy HX 84 on its way from Halifax, Nova Scotia, and then managing to find their way back to their ship without having to break radio silence;

'We approach at low altitude while waggling our wings as promised. There is waving from the bridge as we fly past. Then we take some distance again to flash our Morse message before landing – "Convoy in quadrant 34, heading east." Immediately, I receive the order to land. We wait for our ship to flatten the sea a bit by "leewarding" [turning hard]. We approach, I can rely on Gallinat, my good East Prussian. Only a few metres over the water now, the wave crests shoot backwards below us. Now the engine is idled. Already the sea hits below the floats with a loud screech and bounces us a few metres high. Gallinat applies some power, and again it rumbles. Idling, and after a few ever smaller hops, we have alighted and our good Arado slows down. A happy landing! Our ship is very close and moving slowly. We approach her. The recovery manoeuvre, often trained at home, repeats itself. Then we are back on board.'

Admiral Scheer subsequently sank the convoy's escort, the auxiliary cruiser HMS *Jervis Bay,* and five other ships, but, once again, the aircraft, shaking on its catapult, was seriously damaged by the blasts from the big guns. When the repair effort exhausted the available stock of sheet metal, plywood and bedsheets had to be used instead. On 29 November a successful test flight was made. The aircraft was now painted pale blue overall without proper nationality markings as the ship was heading into the South Atlantic.

On 18 January 1941, the Arado assisted in the capture of the Norwegian tanker *Sandefjord*, which would be sent to Germany with its load of 11,000 tons of crude oil. Upon landing, the floatplane was tossed back into the air by a large wave, causing it to stall and crash left wing and engine cowling first into the water. Gallinat and Pietsch escaped unscathed and the aircraft was quickly salvaged. The wrecked wings were dumped in the ocean, and a few days later spare wings and floats were received from the supply ship *Nordmark*. The aircraft was flyable again by 7 February, and it was successfully used to locate several freighters later that month.



Admiral Scheer's reconnaissance aircraft is hoisted back on board. The blasts from the heavy cruiser's big guns seriously damaged this Ar 196 and, after repairs, it too was painted in raider pale blue with swastika insignia only (*Horizonten*)

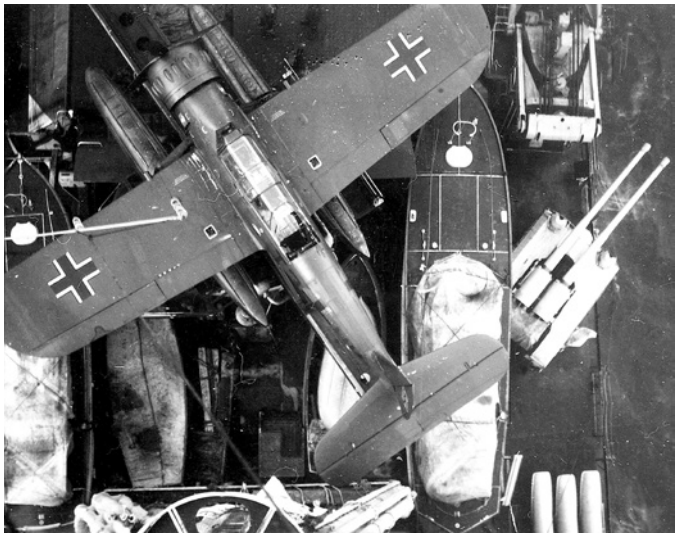
A Walrus from the light cruiser HMS *Glasgow* then found *Admiral Scheer*, but the ship managed to outpace a British cruiser squadron. Heading for home, Kapitän zur See Theodor Krancke declined a fresh Arado

from the already-mentioned supply ship *Alsterufer.* He reached Kiel on 1 April 1941 and was given a hero's welcome. Having sunk or captured 17 ships, *Admiral Scheer* was the most successful major warship raider, although U-boats and merchant raiders often inflicted more damage at a much lower expenditure in terms of manpower and fuel burn.

Meanwhile, *Admiral Hipper* had sailed again on 30 November 1940. It reached the Atlantic, but was hindered by engine problems and bad weather. On 21 December, the weather was benign enough to launch an Ar 196, but the aircraft did not return. Despite searching by the ship and its other Arado, no trace was found of Feldwebel Herbert Schürmann and Leutnant zur See Johannes Nowrat. They were duly listed as missing in action. *Admiral Hipper* sank only one ship before retreating to Brest, in Brittany.

During another raid in February 1941, *Admiral Hipper*'s radar picked up an unescorted convoy and seven ships were sunk – not 13 as its Kapitän zur See Wilhelm Meisel thought when he called it a day and made for the French port again. From there, *Admiral Hipper* sailed to Kiel in March for repairs and modifications.

The battleships *Gneisenau* and *Scharnhorst* also slipped out into the Atlantic, and on 22 February their radars picked up five empty cargo ships without escort, which were all sunk. One victim, *Harlesden*, transmitted powerful radio messages, and to silence it an Arado from *Scharnhorst* employed a *Seilbombe.* The Ar 196 also strafed the steamer, killing a sailor, but it was slightly damaged by return fire. *Scharnhorst*'s captain was reprimanded by Vizeadmiral Gunther Lütjens on board *Gneisenau* for this aggressive use of the sparse reconnaissance aircraft that were crucial to the battleships' survival. On 4 March near the Cape Verde Islands *Gneisenau*'s seaplane landed away from the ship because of fog. It was eventually found by one of *Scharnhorst*'s aircraft and recovered, only to make a crash-landing two days later. On the 14th, one of *Scharnhorst*'s Arados fell from the catapult onto the deck, suffering 70 per cent damage. A total of 22 vessels were sunk by the two battleships during this cruise, which ended at Brest on 22 March.



T3+HK (Wk-Nr 0084) was embarked on board *Admiral Hipper* during the heavy cruiser's December 1940 raid in the Atlantic, the floatplane conducting a fruitless search for the missing Arado of Feldwebel Herbert Schürmann and Leutnant zur See Johannes Nowrat on the 21st (*Horizonten*)

Scharnhorst's two airworthy aircraft departed Brest for Wilhelmshaven a few days later but, probably due to bad weather, Oberfeldwebel Johannes Westphal and Leutnant zur See Karl-Adolf Schlitt crashed near Ostend – seven months after they had rescued a Ju 88 crew and other airmen not far away in the Channel. Schlitt escaped lightly wounded, but Westphal was posted as missing in action.

Now it was the turn of the new super-battleship *Bismarck* to deliver some bang for all the Reichsmarks spent on its construction. A mighty fleet squadron that included all four German battleships was scheduled to break out

into the Atlantic and rule the waves, at least locally and temporarily. However, *Tirpitz* was still not ready, and *Gneisenau* and *Scharnhorst* were undergoing repairs at Brest. Eventually, *Bismarck* sailed with only the new heavy cruiser *Prinz Eugen* for company when it left the Grimstadfjord, near Bergen, on 22 May 1941.

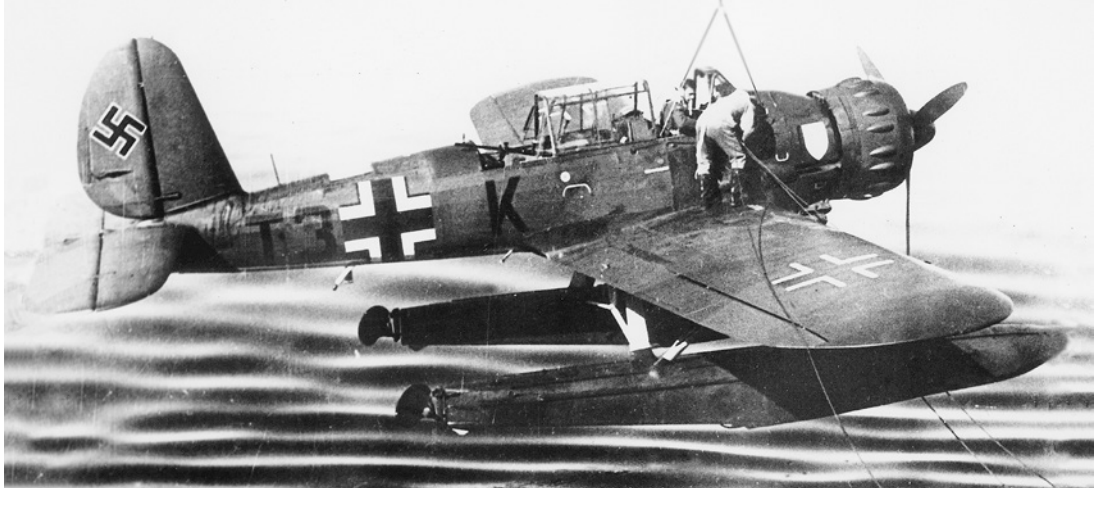
Bismarck and *Tirpitz* each provided shelter for four assembled Ar 196s, with two in a double hangar and two more in small single hangars on either side of the funnel amidships. This is the starboard hangar on *Tirpitz*, which, unlike *Bismarck*, had a rail system, allowing the aircraft to be easily moved in and out on a sledge (*Horizonten*)

Bismarck and *Tirpitz* had hangar space for four seaplanes and a double-headed catapult. *Bismarck* carried two Ar 196A-2s, one A-4 and one A-3 during the cruise, along with eight airmen and nine mechanics. *Prinz Eugen* carried its full complement of three Arados, and thus seven aircraft were available. Not a single flight would subsequently be made because of bad weather and the dangers faced by the ships while moving slowly to recover a seaplane.

After *Bismarck* had blown up the old battlecruiser HMS *Hood*, Fairey Swordfish biplanes from the carrier HMS *Ark Royal* did manage to operate in abysmal weather and famously damaged *Bismarck*'s steering with a torpedo. Before it was finished off on 27 May, Vizeadmiral Lütjens, mindful of future historians, decided to launch an Arado carrying *Bismarck*'s logbook. Even this effort failed, as it was soon discovered that the steam line feeding the catapult had been damaged and none of the airmen escaped the sinking vessel. From the ship's crew of 2221, there were only 115 survivors, including Arado Mechanikerobergefreiter Ernst Kadow. *Prinz Eugen* developed engine trouble and put in at Brest on 1 June.

Gneisenau, *Scharnhorst* and *Prinz Eugen* left Brest for Germany via the shortest route in February 1942 – the so-called 'Channel Dash'. Seaplanes were not embarked, for they were not going to be used anyway. While the

Ar 196A-3 T3+LK (Wk-Nr 0151) was embarked on board *Prinz Eugen* during Operation *Rheinübung*, in which *Bismarck* was sunk. The two ships' seven floatplanes did not see any action in the deadly clash between the Royal Navy and the Kriegsmarine in the Atlantic (*EN Archive*)



Following repairs in Germany after sustaining serious damage when torpedoed by a British submarine near Trondheim on 23 February 1942, *Prinz Eugen* never managed to return to Norway. It became a training ship in the Baltic instead, with T3+BL, seen here on the heavy cruiser's catapult, often embarked (*Horizonten*)

German warships' passage embarrassed the British, *Gneisenau* and *Scharnhorst* hit mines in the North Sea and were damaged. *Gneisenau* was subsequently knocked out by an air raid at Kiel. *Prinz Eugen* also sustained serious damage when it was torpedoed by a British submarine near Trondheim on 23 February. Two Arado pilots, Scheel and Thiel, were among the dead on board. The ship limped back to Germany on 16 May, and at 2028 hrs on the 17th, an Arado crew claimed an enemy aircraft shot down when Beauforts fruitlessly attacked the heavy cruiser.

In fact, the surviving heavy units of the Kriegsmarine were never to venture into the Atlantic again. They mostly stayed in the Baltic and Norwegian fjords, and offensive operations were undertaken only in the Arctic, out of range of land-based Allied aircraft. The first of these raids was mounted by *Tirpitz* which, in March 1942, went after the Allied convoys bound for the Soviet port of Murmansk. Up north, ice covering its Arados prevented them from carrying out any reconnaissance missions. Vizeadmiral Otto Ciliax decided to turn back when British battleships were reported in the area.

At 0830 hrs on 9 March, two Arados were launched from the battleship's double-ended catapult, tasked with scouting ahead for enemy submarines and aircraft. Twelve minutes into their mission, *Tirpitz* was attacked by 12 Fairey Albacores from the aircraft carrier HMS *Victorious*. The nearest Arado, flown by Feldwebel Schmitt and the future *Staffelkapitän* of 1./BoFlGr 196, Oberleutnant zur See Gerhard Gottschalk, went after two of the biplanes and damaged one of them with cannon fire, wounding the observer, Sub-Lt Dunworth. The Arados then had to divert to Bodø because the ship would not slow down to recover them.

Put on 'rations' in the spring of 1942, the surface fleet of the Kriegsmarine was now very short of fuel, but a large operation against convoy PQ 17 was launched in July of that year. Navigating narrow channels off the Norwegian coast, several German ships ran aground, including *Lützow* on its first mission since April 1940. The threat of *Tirpitz*, *Admiral Scheer* and *Admiral Hipper* caused the Royal Navy to order PQ 17 to scatter, and although the German warships retreated, 21 of the convoy's 34 vessels were subsequently sunk by U-boats and the Luftwaffe.

On 16 August 1942, *Admiral Scheer* left the Skomenfjord, near Narvik, for Operation *Wunderland*, aimed at targeting lightly escorted Soviet shipping on the Northern Sea route to the Far East, which the raider *Komet* had navigated with Soviet help two years earlier. It was almost a voyage of discovery. Oddly, only one Arado was carried in the form of Ar 196A-3 T3+EK, with two crews. The first flights were made north of Nova Zembla on the 19th to check the compass, which acted even more capriciously at this latitude than expected. The next day, large icefields were encountered and the Arado flew ice reconnaissance.

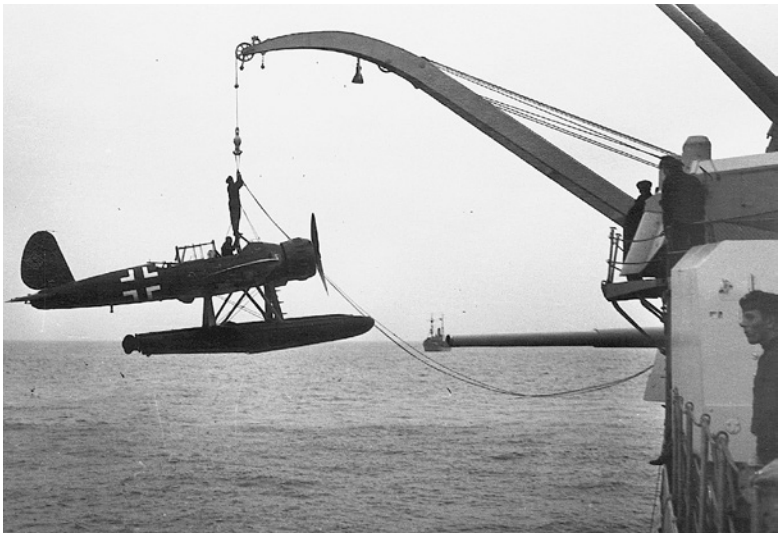
'That was the most beautiful embarked aviation. In wonderful solitude, we flew over the seemingly endless ice wilderness and tried to find a thoroughfare for steamers in the maze of floes and icebergs', wrote the first aviation observer Oberleutnant zur See Karl-Adolf Schlitt, who, recovered from his crash near Ostend, must have felt like Tintin in his yellow Arado in the comic strip *The Shooting* Star, published in 1941-42. Like his fellow Ar 196 observer Ulrich Pietsch, Schlitt became a U-boat commander later in the war – and he was also the subject of many a lavatorial joke because his submarine, *U-1206,* was lost following the malfunction of a high-pressure toilet.

Schlitt and pilot Oberfeldwebel Wilhelm Elke found a convoy off the Mona Islands on 21 August, but it turned out to be heading east, not west as the Germans thought. It was eventually rediscovered three days later, with the ship's navigation officer, Sturmann, flying in the Arado's backseat. Visibility on that day from 12,000 ft was 200 km (124 miles), but the onset of poor weather on the 25th caused the Ar 196 to overturn upon landing in a heavy sea. Its crew survived. The loss of the floatplane meant that Kapitän zur See Wilhelm Meendsen-Bohlken had to turn back, for without the Ar 196 there was no way to navigate through the floes encountered farther east. It was a narrow escape for the Soviet convoy, which was actually trapped in the ice. On the way back home *Admiral Scheer* sank an old Soviet icebreaker and damaged two more ships in Port Dikson prior to returning to Narvik on 30 August.

The Arado of *Admiral Hipper,* now operating from the Altafjord in the extreme north of Norway, spotted the Soviet tanker *Donbass* and an escort on 7 November 1942. The destroyer *Z27* went in and sank both ships. On the last day of the year, *Admiral Hipper* and *Lützow* fought a confused battle in the polar night in the Barents Sea, failing to catch any ships of the Allied convoy JW 51B. A German destroyer was lost. For the Führer, long sceptical about the effectiveness of his surface navy, this was the last straw. All the large warships were to be scrapped, and their guns recycled as coastal artillery. Replacing Großadmiral Erich Raeder as head of the Kriegsmarine, U-boat commander Großadmiral Karl Dönitz managed to prevent this for the time being.

Unteroffizier Meissner and Oberleutnant zur See Wilhelm Rosenbaum pose with their Ar 196 and personnel from the embarked seaplane flight prior to making the 100th catapult take-off from *Tirpitz* around 1 June 1943. Very few of these launches had taken place on the open sea. Tucked away in fjords, the mighty battleship did little to change the outcome of the war, although it did bind British forces as a potential 'fleet in being' (*EN Archive*)

No more operations were mounted, however, and the crew of *Tirpitz* in particular led a monotonous life, tucked away in a Norwegian fjord. This included a sizeable party of Luftwaffe personnel,



An Arado is retrieved by *Scharnhorst*. Almost 2000 men died when the battleship was sunk in the Battle of the North Cape on Boxing Day, 1943 (*EN Archive*)

since a full complement of Ar 196s was kept at readiness for the precious battleship.

The surface navy enjoyed a brief revival in the summer of 1943, and even the embarked air group received some attention. By this time, 5./BoFlGr 196 in France no longer existed as such, and while 1. and 5./BoFlGr 196 had never had an actual parent unit, *Bordfliegergruppe* 196 was now formed at Aalborg, commanded by Major Gerrit Wiegmink and presiding over 1./BoFlGr 196 and no less than two new sister *Staffeln*. 2./BoFlGr 196 was immediately sent off to Italy though. Short-lived 3./BoFlGr 196 was partly equipped with Ar 196s, although it had its origins in an experimental unit, *Erprobungs und Lehrkommando* 20, and had two flights flying Fa 330 Bachstelze rotor kites for U-boats and even Flettner Fl 282 Kolibri helicopters that were still very much in the test phase.

On 6 September, *Scharnhorst* and *Tirpitz* left their hides in the Altafjord for a raid against the island of Spitsbergen on the 8th. Arados flew reconnaissance missions, and two floatplanes from *Scharnhorst* dropped 50 kg bombs while the ship shelled the coal mining settlement of Longyearbyen. One of *Scharnhorst*'s aeroplanes, T3+KH, was badly damaged when returning to the ship. *Tirpitz* had recovered its last seaplane by noon, after which the German vessels sped back to the Altafjord.

Two weeks later, on 22 September, *Tirpitz* suffered significant damage in an attack carried out by British commandos in midget submarines. Two Arados fell from the catapult when the mines dropped under the battleship exploded, suffering modest damage. The subsequent unavailability of *Tirpitz* meant that *Scharnhorst* sailed from the Altafjord alone on Christmas Day, 1943, when intelligence indicated an opportunity to attack convoy JW 55B. A British force was waiting, however, and the following day, *Scharnhorst* was sunk in the Battle of the North Cape. Almost 2000 men perished, including the six airmen and eight mechanics maintaining the ship's three Ar 196s, which were also lost.

A further blow to the *Bordfliegergruppe* was the death of the *Gruppenkommandeur,* Oberstleutnant Gerrit Wiegmink. On 24 March 1944, his staff Junkers W 34 was shot down near Randers, Denmark, by a No 613 Sqn Mosquito VI flown by high-scoring ace Wg Cdr John Braham. On their way to a meeting at Grove (Karup), all four men on board the W 34 were killed including Wiegmink, who was flying the aircraft.

A week later, a Fleet Air Arm attack by 40 Fairey Barracudas on 3 April caused death and destruction on *Tirpitz,* now in the Kaafjord – four Ar 196s on board were practically destroyed too. Although *Tirpitz* was

not down and out yet, the Kriegsmarine surface fleet was now effectively restricted to operations in the Baltic Sea, training and preparing for action against the advancing Red Army.

LAST MERCHANT RAIDERS

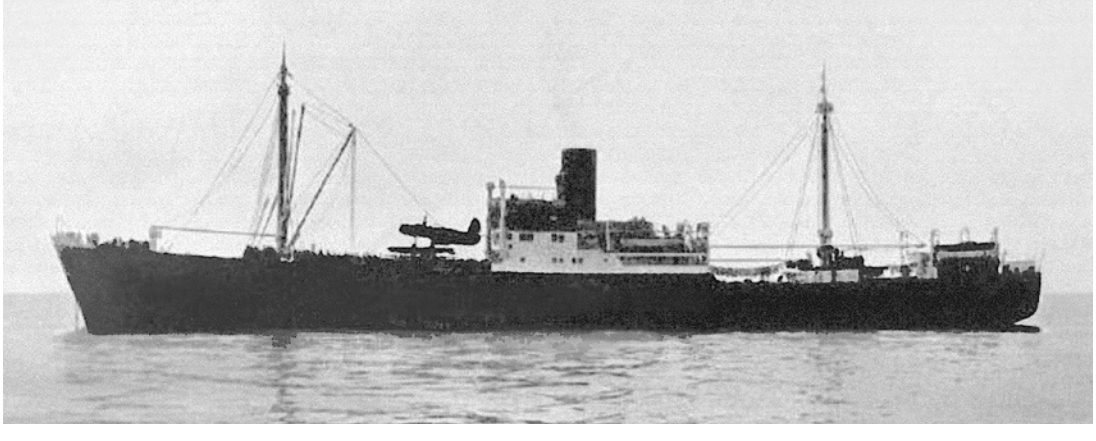
The last merchant raiders had also ceased to terrorise the oceans by late 1943. Two survivors of the first wave of auxiliary cruisers had attempted a second raid, and two newly converted freighters had also put to sea in the spring of 1942.

Thor had sailed again in November 1941, spending 328 days at sea and sinking ten ships after reaching the open ocean through the Channel. Two Ar 196A-3s, including a spare, were received from a Luftwaffe facility in Nantes, the aircraft being painted in merchant raider pale blue. An entry in the ship's logbook complains that the paint was too glossy and conspicuous. Two crews were on board, and Kapitän zur See Günther Gumprich made extensive use of his aircraft. For example, on 30 March 1942 in the South Atlantic, one of the Arados found the British freighter *Wellpark* and, while *Thor* chased after the ship, the seaplane took off again and strafed it to bring it to a stop. The *Seilbombe* was also used on several occasions to take down a target ship's aerial.

Thor and both Arados survived the voyage, and the ship put in at Yokohama, Japan, which was by now an ally, for repairs in October 1942. There, the vessel was destroyed in an accident when the German supply ship *Uckermark* exploded alongside on 30 November.

Michel sailed in March 1942 and spent 354 days at sea on its first voyage, sinking 15 ships. Carrying two Ar 196A-3s, the raider ended its voyage at Kobe, Japan, in March 1943. From here it made a second trip, sinking three more ships until finally being torpedoed by the submarine USS *Tarpon* (SS-175) 80 km (50 miles) off the port of Yokohama on 17 October 1943. Both floatplanes went down with the ship. Of its crew, 116 survivors reached the coast of Japan, including the airmen Unteroffizier Rehnen and Oberleutnant zur See Ulrich Horn.

Stier sailed in May 1942 and spent just 146 days at sea, sinking four ships. Oddly, the ship's seaplanes were two prototypes of the Arado Ar 231



The Kriegsmarine's merchant raiders were innocent-looking ships – except for the Arado seaplane perched on the deck, as seen here on board *Komet*. Most of the time, the aircraft were hangared and hidden in the ships' holds, however (*EN Archive*)

– a fragile single-seater designed to be carried by U-boats. Two flights were attempted, and each time a float strut broke. *Stier w*as badly damaged by return fire from its last victim, the armed American freighter *Stephen Hopkins*, and duly scuttled.

Komet sailed again in October 1942, although it was sunk in the Channel before reaching the Atlantic. The two Ar 196A-3s on board were also lost. Another newly converted auxiliary cruiser that was to have assumed the name *Coronel* upon reaching the open ocean also failed to do so in early 1943, and it subsequently became the Luftwaffe radar picket *Togo* instead.

The Ar 196's flying days in Asia were not finished with the sinking of the last raider, *Michel*, in October 1943, however. Four months later, and thousands of miles away, some of the ship's survivors were rescued by an Arado when they were shipwrecked again in the Straits of Malacca.

This event almost certainly took place on 18 February 1944 (conflicting dates are given), three days after a party of priority passengers, including sailors from *Michel*, had boarded the German submarine *UIT-23* in Singapore. The latter was actually the former Italian submarine *Reginaldo Giuliani*, used to transport important cargoes – in this case, 200 tonnes of rubber, tin and quinine – between Europe and Asia because of its generous size.

Surfaced while exiting the Straits of Malacca, *UIT-23* encountered the British submarine HMS *Tally-Ho*, which was on the prowl for Japanese shipping. *UIT-23* was hit by a torpedo and the 26 men inside could not escape from the sinking U-boat. Fourteen passengers that had been sitting on the outer casing when the vessel was suddenly attacked survived by clinging to debris while floating in a large oil slick that probably protected them against sharks. A short while later a floatplane carrying Japanese insignia appeared. The survivors of *Michel* knew that their Japanese allies had done little to rescue them when their own ship had been sunk not far from Yokohama. But not only did this seaplane land, *Michel*'s sailors recognised the shape of an Ar 196, and possibly even their ship's aviation officer Ulrich Horn emerging from the cockpit! Four or five survivors were tied to the float struts and, in 'speedboat mode', the overloaded Arado taxied to the Japanese-occupied island of Penang. In three such runs, all 14 survivors were rescued.

In 1943, the Germans had set up a small U-boat base on Penang. Called *Stützpunkt Paul*, it allowed the submarines of the so-called Monsoon Group to start operating in Asiatic waters as the merchant raider effort petered out. The approaches to the Straits of Malacca were attractive hunting grounds for Allied submarines, however. The Japanese, unable to effectively defend the perimeters of their vast Asiatic empire, had few escort vessels and anti-submarine aircraft available to protect their own shipping, let alone U-boats of the Kriegsmarine. Therefore, the Germans set up their own *Fliegerkommando* equipped with a few seaplanes to fly cover for the entering and exiting U-boats. Two Ar 196s were shipped in from Japan, with spare parts and ten German flying and ground personnel.

Unless *Komet*'s aircraft survived the explosion of *Uckermark,* the two Arados assigned to *Stützpunkt Paul* had probably been brought to Japan

by the blockade runner *Rio Grande* or by *Uckermark*, with the aim of supporting further raiding voyages from Japan. Certainly, *Uckermark* had carried five of the ten Luftwaffe personnel who were sent to Penang. On 5 November 1943, the war diary of the Kriegsmarine high command notes, 'Naval attaché to Japan [Wenneker] proposes to give two Arado 196 to Japan, as own use in foreseeable future is unlikely following the loss of Ship 28 [*Michel*]'.

Evidently, it was then decided to send the personnel and the aeroplanes to Penang instead, and they left for Malaya on 27 January 1944 on the steamer *Ursula Rickmers*, which was at Wenneker's disposal under its Japanese name name *Teisen Maru*. On 6 March, the Luftwaffe liaison officer with the Kriegsmarine, General Hans Ritter, received the following update;

'In Penang, two Ar 196s are deployed under the command of Oblt.zS Horn. They need ammunition. Wear Japanese insignia. Their mission: reconnaissance in the base area and securing their own submarines as of late February 1944.'

As noted earlier in this chapter, the danger posed by enemy submarines had been amply demonstrated to the airmen on 18 February when they were called on to rescue survivors from *UIT-23*. As to the lack of ammunition signalled to Berlin, the Penang team may have had to improvise because the torpedo transport submarine *U-1059,* which reportedly carried ammunition and bombs for the aircraft, was lost on its way to Asia. The only available photograph (although small and of poor quality) of one of the *Stützpunkt Paul* Arados clearly shows it carrying Japanese light bombs. It also confirms that the aircraft wore Japanese national insignia and was painted dark green overall, and not raider pale blue. The floatplanes had black noses and yellow identification stripes on the wing leading edges as was usual for Imperial Japanese Naval Air Force (IJNAF) aircraft. This scheme made sense in order to avoid friendly fire accidents.

Clearly, the Germans remained in control of the aircraft, but they did have to deal with Japanese bureaucracy and the intense rivalry between the IJNAF and the Imperial Japanese Army Air Force. Contacts on a personal level were also not always easy between the members of the 'Nazi master race' and their allies who were trying to rid Asia of white colonialists. The Arados were based at the former British seaplane facility at Glugor (Gelugor), while Ulrich Horn and his men lived in the elegant Elyseé Hotel in George Town – far from home, but in luxury and safety compared to their comrades in Europe.

On 17 May 1944, Kapitänleutnant Ottoheinrich Junker's *U-532* sailed from Penang for Singapore in an unready state because a slot in a dry dock had been offered by the Japanese. Unable to dive or to run at full power, the U-boat came under attack from *Tally-Ho.* With the help of an escorting Arado, which threw its bombs at the enemy vessel, Junker's boat was able to escape.

On 9 September 1944, *U-862* – one of the last U-boats to make it to Penang from Europe – was escorted in by an Ar 196. The submarine subsequently continued to Singapore, where maintenance was to be carried out, three days later during the evening of the 12th. Again, an Arado provided protection. The following day, Fregattenkapitän

Not an Arado but an Aichi E13A 'Jake', and not German but British Europeans at Singapore-Seletar at war's end. This was probably where the Arados of the German *Fliegerkommando* at Penang were maintained with the help of Hiroshi Yasunaga's IJNAF E13A unit. One 'Jake' was also used by the small German detachment (*IWM, CI 1741*)

Wilhelm Dommes, the German commander at Penang, flew as an observer to Singapore to meet the submarine as it docked and to help the crew liaise with the Japanese.

U-862 had been carrying an Fa 330 Bachstelze rotor kite for observation purposes, and the boat's captain, Korvettenkapitän Heinrich Timm, was happy to leave this flimsy contraption behind in Penang. Another U-boat commander had done the same, and Dommes traded the two Bachstelzes with the IJNAF for an Aichi E13A Reisui, or 'Jake', floatplane to augment his small air fleet.

Maintenance work on the Ar 196s was carried out in Singapore by an IJNAF E13A unit, and Reisui pilot and author Hiroshi Yasunaga saw Ulrich Horn bring in an Arado in the autumn of 1944;

'Just before lunch yesterday, a two-seat floatplane of the German Navy paid a visit to our base. The plane was a twin-float low-wing monoplane, a size or two smaller than our Type 0 Seaplane [E13A]. It was a reconnaissance aircraft belonging to the submarine command stationed in Penang. It touched down gently on the sea about 200 m off the command post. It was a beautiful touchdown. The plane killed its speed until it was very slow, pulled up near stall, and touched down quietly from the rear end of the floats. This surprised me, as I firmly believed that we Japanese were far superior to the white people at such delicate operations as bringing a seaplane down. "Gee, he is so good!", I heard someone comment honestly.'

Yasunaga was not only impressed by Horn's flying, but also by the speed and the ease with which the Japanese mechanics were able to install a new pair of floats. With the E13A, this took sweat, hammering and filing, according to Yasunaga, who felt that both German and American airframers observed much higher industrial standards than the Japanese. He did, however, praise his E13A's Kinsei engine.

Increasing Allied submarine activity and bombing made Penang untenable as a submarine base, and in November 1944 the Germans, including the *Fliegerkommando*, moved to Jakarta (Batavia). The last attack by a U-boat in the Indian Ocean took place on 6 February 1945 when Korvettenkapitän Timm's *U-862* sank the American Liberty ship *Peter Silvester* 1130 km (700 miles) west of Perth, Western Australia. At 1700 hrs on 14 February, Timm's U-boat was met by an Ar 196 that provided anti-submarine cover as a Japanese vessel led *U-862* into Tanjung Priok. At the end of the war in Europe, the two Arados and the E13A were given to the IJNAF, which is unlikely to have made much use of the German seaplanes.

CHAPTER FIVE

EASTERN FRONT AND THE MEDITERRANEAN

On 1 April 1941 the Luftwaffe created two new maritime reconnaissance units, *Aufklärungsfliegergruppe* (AufklGr) (*See*) 125 and 126, or SAGr 125 and 126 as they were renamed in mid-1943. Meant for maritime operations in the upcoming war against the Soviet Union, they were not expected to meet serious opposition. AufklGr 125 was equipped with a mix of He 60, He 114 and Ar 95 biplanes, while a small number of Ar 196s were also delivered to its *Staffel* 2./AufklGr 125. This unit started its campaign in East Prussia at Fischhausen (Primorsk), and had soon advanced to Haapsalu, on the Estonian coast.

On 4 July, at Libau (Liepāja), the *Staffel* lost its first Ar 196 during a clash with Soviet flying boats – the latter must have been Beriev MBR-2s. At 2115 hrs on 15 July, 2./AufklGr 125 got its revenge as an MBR-2 was shot down off Vilsandi. On the 31st, observer Oberfeldwebel Karl-Heinz Brunner was wounded and his Arado damaged by enemy fire off Ösel (Saaremaa), and two days later an Ar 196 was caught by enemy fighters over the Gulf of Finland. Its crew was listed as missing in action.

While the Wehrmacht already stood at the gates of Leningrad, the Red Army was obviously shooting back, and on 10 and 11 August two flights with seven Ar 196s of 1./BoFlGr 196 moved to the Baltic theatre as

Three Ar 196s of 1./AufklGr 125 were based at the Finnish seaplane station at Santahamina, near Helsinki, for a few days to secure the crossing of the Führer's Fw 200 Condor on 4 June 1942 (*Horizonten*)

reinforcements. The new detachment lost its first aircraft and crew three days later when it did not return from a reconnaissance sortie over the Gulf of Riga.

A few other 1./BoFlGr 196 Arados and crews were embarked on *Tirpitz*, *Admiral Scheer*, *Nürnberg* and *Leipzig*, as these ships were tasked with preventing an outbreak of the Soviet navy from its bases at Leningrad and nearby Kronstadt. When this did not occur, the light cruisers shelled coastal targets and their Arados undertook some reconnaissance and artillery spotting sorties.

When the winter set in, 2./AufklGr 125 redeployed to the Black Sea as an all-Ar 196 unit. Leningrad and Kronstadt were never taken by the Germans, and Soviet submarine activity kept the Arados of the 1./BoFlGr 196 detachment occupied at Ülemiste, in Reval (Tallinn), until January 1943. By then, the Germans had successfully blocked the Gulf of Finland with mines and anti-submarine nets. The detachment's worst day was 19 June 1942 when two Ar 196s disappeared while on an anti-submarine mission over the western Gulf of Finland. Wreckage from one of the aircraft washed up at Baltischport (Paldiski) a few days later. On 14 July another Arado fatally crashed when returning from a reconnaissance flight, the floatplane plummeting vertically into Tallinn Bay off Aegna Island.

Early in June 1942, three Ar 196s of the 1./BoFlGr 196 detachment had briefly been based at Santahamina, near Helsinki. Their mission was to help secure the crossing of the Gulf of Finland on 4 June by an Fw 200 Condor that was carrying the Führer, in great secrecy, on a birthday visit to Carl Gustav Mannerheim, Marshal of Finland, to discuss military strategy.

Also active in Finland was the *Kurierkette* Lappland, a small liaison unit supporting the Wehrmacht's Lappland Army. The latter had deployed from Norway to northern Finland to engage the Soviet defenders of Murmansk. The *Kurierkette* Lappland used two Ar 196s borrowed from 1./BoFlGr 196 during the 1942 summer season, its aircraft undertaking a variety of missions including the infiltration and supply of small German commando groups, as well as Finnish Sissi

Ar 196A-4 BB+YB (Wk-Nr 0128), fitted with a variable-pitch VDM propeller and spinner, has landed on the Murmansk Front with a doctor on board who has been tasked with treating casualties suffered by 324. *Infanterie-Regiment* (*Horizonten*)

patrols, behind enemy lines. With radio equipment removed, three equipped soldiers could be carried in the Ar 196's rear cockpit.

For the summer 1943 actions of the Finnish Sissi units, the Luftwaffe sent two He 115s and two He 59s. On 8 August, the new *Staffel* 2./BoFlGr 196 was also ordered to urgently provide two Ar 196s 'for Abwehr [military intelligence service] missions behind the lines'. However, the unit was in the process of sending six aircraft to Italy, so it instructed Luftwaffe high command that it had no Arados available. A single Ar 196A-2, GA+DO, was finally found somewhere and sent to Finland in early September 1943.

Based at Kontiolahti-Hirviranta in the southeast, the seaplanes, which retained their German markings, were usually flown at night by Finnish pilots serving with the Detachment Malinen. The Ar 196 had made 18 flights, including three carrying troops, by the time it was returned to the Luftwaffe on 23 October. Similarly, in the 1944 summer season, two Ar 196s were used in support of Finnish 'bush' patrols (now being made by Detachment Jauri) from 7 July. These aircraft were supplied by the Luftwaffe special operations unit KG 200 and wore the codes A3+AC and A3+BC. Again, Finns flew the aircraft.

Also seasonally operating Ar 196 seaplanes was the so-called *Sumpfnotdienst* (swamp emergency service) attached to the *Seenotstaffel* in Kirkenes, in the far northeast of Norway, but flying predominantly in northern Finland. The unit was set up in the summer of 1942 to rescue downed aircrew from the tundra swamps along the northern end of the Eastern Front. By then the German Lappland Army had 180,000 troops here, outnumbering the population of the northern wilderness. Medical evacuation missions were also flown. Perhaps the first seaplane of the unit was the V3 prototype of the Arado Ar 199 floatplane trainer, lost on the Litsa River front on 14 August 1942. Two Ar 196A-2s were on strength by the following month. Fw 58 Weihe and Fi 156 Storch landplanes were also used. One of the *Sumpfnotdienst*'s most important operating locations was the German-built seaplane base 'Olga' on Lake Olkkajärvi near the hospital in Rovaniemi. Forward locations included Alakurtti and Kiestinki (Kestenga) in occupied Soviet territory.

In the summer of 1943, the *Sumpfnotdienst* operated at least eight Ar 196s, including four known A-4s. GA+DV evacuated 59 wounded in 37 flights between 9 and 19 August 1943, whilst GA+DY carried off 53 wounded in 29 flights in just four days. At least one infiltration flight transporting operatives was also carried out by Leutnant Josef Berendes in BB+YB on 3 September 1943. The unit was still active in September 1944.

THE BLACK SEA

Raised on 1 April 1941, AufklGr (*See*) 126 was probably intended for operations in the Black Sea. However, the German efforts to secure the soft underbelly of Fortress Europe before invading the USSR meant that the unit deployed to Greece instead. It had three *Staffeln* with mainly He 60s, but there was also one flight of three Ar 196A-2s.

On 23 July 1941, with the Eastern Front receiving priority, this *Kette* of three Arados, commanded by Leutnant Thiele, flew northward again via Bulgaria to Siutghiol lake at Mamaia, near the Romanian Black Sea

port of Constanța. Here, they joined the He 59s of 8. *Seenotstaffel*, which was tasked with maritime reconnaissance as well as rescue missions. Romania was actively taking part in the invasion of the Soviet Union, and the Mamaia base was also used also by Romanian Cant and Savoia flying boats.

The Arados flew their first missions on 25 July, and on the 29th one attacked a patrol vessel at Odessa, the main objective of the Romanian army. The Ar 196's two 50 kg bombs failed to explode, however. On 4 August, two Arados clashed with a pair of MBR-2s that were both claimed shot down. An He 59 rescued two Soviet airmen, so at least one aerial victory can be confirmed. These Ar 196s were CK+FB and CK+FI.

On 16 August, a Soviet submarine – probably *ShCh-211* – was attacked by a pair of Arados off the Bulgarian coast and claimed destroyed. There was no physical proof of its demise, however. Another submarine was attacked by the crew of CK+FB two days later, and it was reportedly damaged. The next day, 19 August, CK+FI made an emergency landing with engine trouble off the Romanian coast. CK+FB took off from Mamaia and landed to take CK+FI's crew on board. Later that same day, a German boat that had tried to find the stricken Arado was attacked by Soviet aircraft, but these were in turn taken on by CK+FB.

That particular aeroplane was pretty busy because on the 20th it unsuccessfully searched for another Soviet submarine that had attacked the sole Romanian submarine, *Delfinul*. CK+FI was finally salvaged on the 22nd, although the aircraft had been so badly damaged by strafing MBR-2s that it was put on a train and sent to a scrapyard in Wiener Neustadt, Austria. On 24 August, CK+FB clashed with two Soviet seaplanes during a morning patrol, and on 14 September an Arado unsuccessfully searched for a downed Ju 88 crew from III./KG 51.

The two surviving Ar 196s were due for an overhaul and left for Travemünde on 15 September and 22 October, respectively. To replace them, two 'new' Ar 196A-2s, both repaired after accidents elsewhere, arrived at Siutghiol lake on 1 October. CK+FJ was already in action the next day, flying a reconnaissance mission to Odessa. On the 5th CK+FJ bombed and strafed a tugboat as the Soviet navy started to evacuate the city. The next morning, CK+FJ's crew claimed a flying boat shot down. At around 1500 hrs, CK+FF beat off an attack by two more flying boats. Although the Arado's observer was wounded, he claimed to have seen one of the attackers land and then sink, while the other broke off the engagement 'trailing smoke'. Misidentified as Chyetverikov ARK-3s (only seven of which were built), they were probably MBR-2s or perhaps Chyetverikov MDR-6 flying boats (of which 27 examples were built). Wreckage spotted from one of 8. *Seenot*'s new Dornier Do 24 flying boats confirmed that at least one enemy aircraft had gone down.

2./AufklGr 125 was transferred to the Black Sea theatre equipped with Ar 196s towards the end of 1941, reportedly basing itself at Akkerman (Bilhorod-Dnistrovsky) near Odessa. Sister *Staffel* 3./AufklGr 125 also left the Baltic and was sent to Mamaia with Ar 95 biplanes and BV 138 flying boats. If the unit's personnel expected to sunbathe on the Black Sea coast, they were very much disappointed. The coldest winter in memory set in, causing the German seaplanes to migrate south to Varna, in Bulgaria.

A BV 138 Seedrache and an Ar 125 of SAGr 125 at Sevastopol, the great bulwark in the Black Sea, in 1943. The last German foothold in the Crimea was taken by the Red Army on 12 May 1944 (*EN Archive*)

2./AufklGr 125 did not stay in the Black Sea theatre for long, moving on to Greece in early 1942.

We know little about Arado activity in the Black Sea in 1942, although 8. *Seenotstaffel* still operated at least two Ar 196s at the time of the Axis siege of Sevastopol, in the Crimea, early that summer. The Wehrmacht also advanced in the Caucasus, on the eastern shore of the Black Sea, but the German collapse at Stalingrad forced them on the retreat into the Taman peninsula. In March 1943 at least one Ar 196 was at the Ortasli-See, a lagoon from where Do 24 and Ju 52/3m See floatplanes took part in the German evacuation across the Kerch Strait. This Arado belonged to 3./AufklGr 125, the BV 138 *Staffel*.

Despite the help of the Romanians, now equipped with He 114s, 3./SAGr 125 needed reinforcement in the maritime patrol role, and sister *Staffel* 1./SAGr 125, which had lately been based as far away as northern Norway, was re-formed at Sevastopol in July 1943 and equipped with BV 138s and two Ar 196s. On 2 July, an Ar 196 assigned to the *Gruppe* staff was lost in a landing accident, and on 1 August an Arado from 1./SAGr 125 had to be written off after the engine failed near Sevastopol.

The other *Staffel* nominally belonging to SAGr 125, 2./SAGr 125, was based in Crete, in the Aegean Sea, but was absorbed by SAGr 126 in 1943. A new 2./SAGr 125 was raised at Sevastopol in December 1943, equipped with Ar 196s and probably taking over any Arados left with the two BV 138 *Staffeln*. The German troops in the Crimea had by then already been cut off by the Soviet advance in Ukraine. On 26 February 1944, an Arado of 2./SAGr 125 was lost during a convoy escort mission along the short coastal stretch between Yevpatoria and Sevastopol. On 19 March, another escorting Ar 196 was lost to enemy fire near Ak-Metschet (Chernomorskoye).

Two more Ar 196s were destroyed at Sevastopol as the Red Army shelled the city on 21 and 25 April. 2./SAGr 125 left for Mamaia days later. There is very little information about the Arados' actions during the Axis airlifts and sealifts out of Odessa and Sevastopol – the kind of emergencies in

7H-HK of 2./AufklGr 125 patrols over Souda Bay, Crete, in 1942, the seaplane being equipped with a standard load of two 50 kg bombs. Large national insignia are carried, as is the older unit insignia featuring a harpooned shark (*EN Archive*)

which record-keeping breaks down. Soviet sources note, though, that the Ar 196 was potent enough to pose a serious danger to Ilyushin Il-4 torpedo-bombers, which would attack flying straight and level at speeds of about 300 km/h (186 mph).

Some 130,000 Axis troops had been shipped back to Romania by 11 May 1944, after which the Black Sea was left to the Soviets. The new 2./SAGr 125 stood down at the Mamaia base on 1 June, its last Arados having left for Greece on 24 May. They were added to SAGr 126, which had then been fighting in the Aegean theatre for a full three years.

THE AEGEAN – 1941-43

The Wehrmacht had swiftly conquered mainland Greece in April 1941, and on 9 May, AufklGr 126, flying He 60s and a few Ar 196s, made itself at home at Skaramagas shipyard in Athens, on the Bay of Eleusis. One of its three *Staffeln* was at Kavala, east of Salonika. Crete was taken by airborne troops, and soon the *Gruppe* was busy patrolling the sea lane between Piraeus and Crete, where British submarines were on the prowl. Late in July, the Ar 196 *Kette* was summoned to the Black Sea, however, which left AufklGr 126 exclusively equipped with the unsatisfactory but indestructible He 60.

In September 1941 the *Gruppe* was reported to be converting to Fokker T.VIIIWs – twin-engined Dutch floatplanes, of which a batch was completed for the Luftwaffe – and Ar 196s, but few if any Arados arrived in Greece until January 1942, when the second *Staffel* of sister *Gruppe* AufklGr 125 arrived in Athens with nine Ar 196s. Finally, by the end of April 1942, AufklGr 126 had been re-equipped with 18 Ar 196s, in addition to the T.VIIIWs. One Arado crashed near Brindisi, Italy, on a delivery flight on 17 April, the observer drowning. The Fokker floatplanes did not last long and had been replaced by Ar 196s by mid-September 1942.

With a considerable number of Ar 196s active in protecting the supply lines of the Afrika Korps, losses inevitably began to occur. On 23 April 1942, for example, Ar 196A-3 7R+DK of 2./AufklGr 125 disappeared with its crew, Stempfhuber and Beyert, between the mainland and Crete, and on 4 July an A-3 of AufklGr 126 crashed upon landing in Souda Bay, near Chania on Crete. Its pilot was killed.

2./AufklGr 125 based itself at Souda Bay from February 1942 after the harbour there had been largely cleared of shipwrecks, enabling the seaplanes to give good coverage of Axis convoy routes from Piraeus to North Africa. Aircraft of AufklGr 126 often landed at Souda Bay too.

Although the latter had been a stop for Imperial Airways' flying boats, this had been discontinued in 1930 and facilities here were far from ideal. On 10 January 1943, 2./AufklGr 125 reported only two out of its 14 Arados serviceable. Oberleutnant zur See Paul Kriebel, later a senior officer in the West German Marineflieger, was the *Staffelkapitän* at Souda for almost two years. He remembered;

'We had a wooden ramp at our disposal for three or four Ar 196s, and a concrete slope for launching and retrieving the aeroplanes. Across the water runway in the bay, there were buoys for 20 seaplanes. The workshops were in two buildings of a factory destroyed during the Battle of Crete in 1941, the ground floors of which had been rebuilt. The base grounds were divided by the [old] Heraklion–Chania road. North of this road was the real base, with the technical facilities and the officer's mess. South of the road were the quarters, kitchens, non-commissioned officers mess, canteen, firing range and ammunition depots.'

Kriebel had to share the base with a detachment of 7. *Seenotstaffel* from Athens-Phaleron, generally with one rescue Do 24, and an Italian detachment of 288ª *Squadriglia* with three Cant Z.506 floatplanes. The latter moved to Leros in April 1943.

Night landings at Souda Bay were best avoided noted Kriebel. 'Dumps with barrels of aviation petrol were located on islands in the Aegean – the locations were known to all the crews. When a convoy escort mission protracted until sunset, the crew landed near such an island, staying for the night there.'

Orders for 2./AufklGr 125 to return to the Black Sea were cancelled a few times, and it became practically a satellite *Staffel* of AufklGr 126 at Athens, while still proudly flying its own colours. 'Until the autumn of 1943, 126 had only administrative and disciplinary authority over the *Staffel*, even though it was renamed from 2./125 to 4./126 in the middle over the year', Kriebel explained. Operationally, 4./AufklGr 126 fell under the command of the *Fliegerführer Kreta*, while the *Gruppe* received its operational orders from the *Luftwaffenkommando Süd-Ost* at Athens-Tatoi. According to Kriebel, 'To save time, it happened that the orders for the *Staffel* were sent directly from the *Luftwaffenkommando* in Greece'.

At this time, AufklGr 126 was officially annexed by KG 100, a bomber wing flying He 111s, and redesignated III./KG 100. This was little more than a paper move, although KG 100's attractive Viking ship badge soon adorned the Arados and was retained when the seaplane unit became AufklGr (*See*) 126 again in February 1943, and SAGr 126 two months later.

On 14 December 1942 an Ar 196 escorting a small convoy attacked the British submarine HMS *Tafu,* but it was not damaged and sank the Italian tanker *Delfin* near Makronisos.

The life of the Arado crews in the Aegean was relatively uneventful, but this would change after the Afrika Korps lost the Battle of El Alamein and the Allies landed in Morocco and Algeria in November 1942. Although the Axis withdrawal from Libya meant fewer convoys to be escorted for the Aegean-based Arados, it also signalled an increasing RAF presence in the air – especially from the Ar 196's old adversary over the Bay of Biscay, the Beaufighter. However, when flying as torpedo-bombers, Beaufighters, Beauforts and Martin Marauders were vulnerable in air combat, even

though the Arados' slow speed gave its pilots only small windows of opportunity. On 3 January 1943 an Arado crew from Athens claimed a Marauder shot down, with No 14 Sqn losing FK375 after an attack against a convoy near Agios Georgios, south of Athens. The crew of Capt Bruce Young (of the South African Air Force (SAAF)), five of which were killed, reported seeing twin-engined aircraft and an autogiro.

On 19 January, just south of Milos, two No 14 Sqn Marauders attacked the Italian tanker *Alfredo* which was en route to Heraklion with an Ar 196 escort. Plt Off Elliott later reported;

'I gave instructions over the R/T to attack and both aircraft turned to starboard and attacked in fluid formation. The enemy aircraft, an Arado 196, made a head attack on F/O Grimsey, making him break off his attack and preventing a drop. The Arado then attacked, and by feinting right, then left, I managed to pass and resume my attack.'

Elliott's torpedo struck the small tanker, which sank quickly.

On 21 May, a clash with Beaufighters occurred in the same area. No victories were claimed by SAGr 126 or by No 227 Sqn, but Beaufighter VIC JL514 of Flt Lt Atkins and Flg Off Wellington was lost after combat with an Ar 196. They may also have also fallen victim to a Ju 52/3m gunner, however.

On 29 May, a Ju 52/3m See flying from Milos to Athens was shot down by Beaufighters of the same squadron, despite an escort by Arados of SAGr 126. The float-equipped Junkers transport crash-landed off Loutra, on the Greek island of Kythnos, and sank while on fire. Although one passenger was killed, the remaining occupants managed to swim to shore. Ar 196 D1+IH suffered 35 per cent damage in a forced landing shortly thereafter, but the observer lost his life. D1+AL disappeared without trace on 4 June, pilot Nitzsche and observer Steltzenberg carrying out a reconnaissance flight towards the Dardanelles at the time.

On 15 June 1943, a flight of RAF Hurricane IICs from No 213 Sqn, escorting Martin Baltimore bombers, spotted five Ar 196s near Rhodes but the German floatplanes quickly turned away. The *Staffel* at Souda Bay, by then designated 4./SAGr 126, had set up a detachment at Rhodes in the previous month. According to Paul Kriebel, just one non-commissioned officer and three privates ran the detachment, and combat operations from Rhodes were sometimes flown by up to four Ar 196s.

Groundcrew replenish the tanks of two Ar 196s at Souda Bay in mid-1942. The original German caption for this photograph read, 'Crete, one year after [the Battle of Crete]. German reconnaissance seaplanes refuel for a mission over the surrounding waters. They protect German convoys against English submarines' (*Andrew Thomas collection*)

On the large and rugged island of Crete, British special forces operated in conjunction with local resistance fighters. Boats were run from North Africa, preferably the Fairmile Type B motor launch, which could get to

Crete in a 14-hour overnight trip. The seaplanes from Souda Bay were a significant danger braved during the crossings. Allegedly on 30 April 1943, an Arado patrol spotted, strafed and stopped a small boat, although an Ar 196A-3 of 2./SAGr 125 was lost after an emergency landing. This may also have happened on 2 May, for which date similar events are reported. Just after dawn on a day in July, launch ML 361 was attacked by three Arados. Apparently it managed to get away, but the boat was shot up and half of the crew wounded. Combat between an Arado and a British motor torpedo boat was reported on 29 July too. The seaplanes of 4./SAGr 126 also flew ground attack missions against the rebels in the Cretan mountains, supporting German occupation troops.

Reporting on 31 July, the 21st Anti-Submarine Flotilla of the Kriegsmarine praised the courageous and energetic manner in which the crews of two Ar 196s defended the steamer *Elsi* and its escort vessel *UJ-2102* (a requisitioned Greek yacht) against two Beauforts, which were prevented from launching their torpedoes successfully.

On 23 July, a Beaufighter crew of No 227 Sqn and a Hurricane IIC pilot of No 94 Sqn both failed to down an Ar 196 that dodged their attacks at low altitude. On that day a force of 90 Hurricanes, guided by two pairs of Beaufighters, had attacked targets of opportunity on Crete. On 3 August, Arado 7R+AK of 4./SAGr 126 did not survive an encounter with Beaufighters off Chania, Oberfeldwebel Karl Stienkemeier and Leutnant Wolfgang Zacharias being killed when they crashed into the sea.

CENTRAL AND WESTERN MEDITERREAN

Tunisia became the Axis' last bulwark in North Africa, and to help secure the supply lines from Italy, a contribution was required from the jack of all trades, 1./BoFlGr 196. A flight of seaplanes duly 'puddle-hopped' their way from Wilhelmshaven to Sicily in January 1943. The Marsala seaplane base on the island's west point was the intended destination, but the flight ended up much less conveniently based in the port of Palermo. Information is lacking about the detachment's operations in Italy, which must have witnessed the Axis defeat in Tunisia in May and the invasion of Sicily in August. It appears that a few surviving Ar 196s flew to Orbetello, not far from Rome, joining a detachment of 1./BoFlGr 196's new sister *Staffel* 2./BoFlGr 196.

Wearing a freshly applied white Mediterranean theatre band, newly delivered Arado-built Ar 196A-5 6W+GK (Wk-Nr 0360) of Étang de Berre-based 2./SAGr 128 commences its take-off run shortly after it was assigned to the recently redesignated *Staffel* on 5 June 1943 (*Horizonten*)

Raised at Kiel in July, 2./BoFlGr 196 was also ordered to send six aircraft south no doubt in response to the Allied landings

Ar 196s from 2./SAGr 126 sit idle between patrols at the mole in the old port of Patras, in Greece. Arados flying from here were involved in operations against Italian troops in the Ionian Islands in September 1943 (*Horizonten*)

on Sicily on 5 August. Flying via Bad Zwischenahn, Mannheim-Sandhofen on the Rhine and Friedrichshafen on Lake Constance, the detachment under Oberleutnant zur See Borchert did not arrive in Venice until the morning of 13 August, and it was at the Italian seaplane base at the Laguna di Orbetello by the 24th. A week later, on 2 September, 2./BoFlGr 196 suffered its first loss in Italy when T3+FM disappeared on an anti-submarine patrol to the northeast of Sardinia.

Benito Mussolini's government had by then been toppled, and the Germans reacted swiftly and occupied most of the Italian mainland before the Allies. It was decided to give up Sardinia, Corsica and Elba, however. To help secure the withdrawal from these islands, 2./BoFlGr 196 was joined on the Italian coast by aircraft of 2./SAGr 128, the offshoot of 5./BoFlGr 196 in Brest, now based at the Étang de Berre near Marseilles with 11 Ar 196s and He 115s.

On 27 September, two Arados encountered another No 14 Sqn Marauder. According to the report of Flt Sgt F E Spedding, two Arados were seen flying south but only one attacked FK128 after turning sharply towards the Marauder's beam. The gunners claimed hits on the engine of the Arado, which disappeared low over the sea trailing black smoke. It was claimed destroyed, but no losses are listed in German records. FK128 was also attacked by Bf 109s, which inflicted sufficient damage to cause the Marauder to crash upon landing at Protville airfield in Algeria. Spedding and his crew walked away from the wreck.

Forty-eight hours later, the two Arado units lost no fewer than four aircraft and five airmen. Two were shot down in a clash with six Free French Spitfire Vs of *Groupe de Combat* 1/3 off Bastia, the crew of T3+EM being rescued but the pilot and observer/gunner in T3+DM being listed as missing in action. On the same day, 6W+BK and 6W+EK of 2./SAGr 128 collided farther east between Corsica and Elba, and there was only one survivor. These Ar 196s were all new A-5 model aircraft.

While Sardinia and Corsica were given up, the Germans moved to take over other islands and areas occupied by the Italians. The massacre of resisting Italian troops at Cephalonia is well-known. Between Cephalonia and Corfu, an Ar 196 of 2./SAGr 126 was shot down while attacking Italian motor boats on 19 September. The crew was killed. Also in the Ionian, another SAGr 126 aircraft had crashed in the Gulf of Patras two days earlier, and a photograph shows a flight of Ar 196s in the old port of Patras. According to Paul Kriebel, 3./SAGR 126 had a detachment at Preveza, farther north.

On 18 November 1943, an Ar 196A-5 of 4./SAGr 126 was shot down over the coast of Montenegro by South African ace Gp Capt Petrus 'Dutch' Hugo, the CO of the RAF's No 322 Wing, while flying a Spitfire VC.

Pilot Unteroffizier Paul Rogge and observer Leutnant Friedrich Kellner lost their lives. Perhaps this crew was to have joined 2./SAGr 196, which had just crossed northern Italy from La Spezia to return to Venice, the Kriegsmarine having ordered a seven-aircraft Ar 196 unit to be formed there for escort duties in the Adriatic.

Preparing a new defensive line, the Germans were occupying some of the Croatian islands. Shortly after its arrival in Venice, on 14 November, 2./BoFlGr 196 lost Ar 196A-3 T3+EM near Plavnik while escorting an unidentified ship referred to as *Kreuzer C*. What happened to the aircraft remains unclear, and the crew, Knussmann and Pflugmann, were killed.

On 18 March 1944, four of 2./BoFlGr 196's Arados were slightly damaged at Venice in a strafing attack by P-38 Lightnings. The Do 24s of 6. *Seenotstaffel* made fatter targets and were more seriously affected. This attack was a clear example of how Allied air power over Italy had now made the Adriatic an increasingly unsurvivable environment for Luftwaffe seaplanes, and 2./BoFlGr 196 withdrew to Germany on 27 May.

THE AEGEAN – 1943-44

The Italian change of sides had far-reaching consequences in the Eastern Mediterranean too. Here, the Dodecanese Islands, including Rhodes and Leros, with its fine harbour, were Italian possessions, while much of Greece and its islands were also under Italian occupation. The Germans had already sent troops to Rhodes earlier in 1943, supported by a small Ar 196 detachment from Crete. These troops attacked the Italian garrison on 9 September, and within two days they were in control of the island. Rhodes had the best airfields in the region, and these were now denied to the Allies. This in turn protected the Balkan hinterland, and specifically the Ploeşti oilfields in Romania – a key motivation behind the German campaign in the Aegean in the autumn of 1943.

On 17 September, three Arados of 1./SAGr 126 and the patrol boat *UJ-2104* were escorting a small German convoy consisting of the freighters *Pluto* and *Paula*, carrying reinforcements for Rhodes from Piraeus, when seven or eight Beaufighter XIs from Cyprus-based Nos 227 and 252 Sqns engaged the ships south of Naxos at around 1430 hrs. Flying in a fighter role, the No 252 Sqn machines went after the Arados, and Sqn Ldr Keith Faulkner forced one of them down. Although no Beaufighters were lost in return, V8335, flown by Belgian Flt Lt Charles Delcour, was hit and his gunner Sgt Tom Lumsden killed.

Unteroffizier Fritz Schaar and observer Unteroffizier Herbert Schneider in the stricken Ar 196 landed near *UJ-2104* and were rescued by the crew of this former Norwegian whaler, which also took their Arado, D1+EH, in tow. The floats were damaged and filled with water, however, and the aircraft sank at around 1430 hrs. While north of Stampalia (Astypalaia), the convoy was attacked by destroyers and both merchant ships were sunk. *UJ-2104* was also badly hit, and although it did not sink, many of the crew jumped overboard and drowned, including, apparently, the airmen Schaar and Schneider.

The British gambled by landing troops on Leros, Kos and other islands with little air cover and no American support. This in turn allowed the better equipped Germans to win some of their last victories of the war. Their air

superiority was assured by tackling Kos first – the only British-held island with a half-decent airfield. Aerial combat over Kos on 28 September saw several Spitfires from No 7 Sqn SAAF shot down by Bf 109s of JG 27. An Arado landed to rescue downed SAAF pilot Lt 'Bassie' Basson, but he did not want to be captured by the Germans and hid under the seaplane until the crew gave up and took off. An Arado did pick up Bf 109 pilot Unteroffizier Jakob Herweg, however. He had been rescued by a *caique*, but jumped overboard and swam to the seaplane when it alighted nearby.

Fellow Bf 109 pilot Unteroffizier Theo Heckmann of 7./JG 27 was flying top cover over the small German invasion fleet bound for Kos on 2 October when he spotted an Ar 196 that fired identification flares – but not in the correct colour according to Heckmann. Weary of reported Italian 'Badaglio traitors' flying in German aircraft, the fighter pilot chose the middle way and fired some rounds into the Arado's wings and tail, forcing it to land. He later heard he had shot down Generalleutnant Friedrich-Wilhelm Müller, leader of the German forces during the Dodecanese Campaign! Müller, who was executed for war crimes in Greece in 1947, made extensive use of a SAGr 126 Arado to oversee operations in the Dodecanese.

The Wehrmacht successfully landed on Kos the next morning. After attacking the German ships, three Beaufighters, having flown all the way from Idku in Egypt, were chased by Arados – six of them according to one of the British pilots. JM238 of No 46 Sqn spun into the sea with a shot-up engine, although it appears that the Beaufighter was hit by flak over the target, not by fire from the Arados. No 46 Sqn lost its popular CO, Wg Cdr George Reid, in the crash, although his navigator Bob Peasly survived and was taken to hospital in nearby Bodrum, Turkey.

The Germans then occupied a few smaller islands deemed to be of strategic importance. Ju 52/3M See were employed as troop transports, and on 26 October two of these, escorted by three Ar 196s, ran into a British formation off Stampalia. One trimotor floatplane was shot down by a Beaufighter, and Ar 196A-5 D1+DK was also lost with its crew, although there seems to be no corresponding claim from the British side. Three days later, between Amorgos and Naxos, nine Beaufighters attacked a small ship. JM225 of No 47 Sqn was lost, the aircraft last seen being pursued by three Ar 196s. Pilot Oberfeldwebel Stahlbohm of 2./SAGr 126 was credited with the victory, Flg Offs John Dixon and George Terry having perished in the Beaufighter.

One week earlier, on 22 October, 20 km (12 miles) to the south of Stampalia, an Ar 196 had tried to rescue a downed Ju 88 crew. With the latter clinging on to the floats and struts, Arado 7R+GK attempted to make for the nearest port, which was some distance away. Its floats were probably damaged in the process, for the Ar 196 sank after five hours of taxiing. The two crews were apparently picked up by a German boat. Paul Kriebel claimed that Ar 196s of SAGr 126 saved 'hundreds of German soldiers' from sunken ships in a similar fashion, taxiing on the surface to the nearest island with 20 to 30 men sitting on the floats and wings.

On 6 November, eight Beaufighters of Nos 47 and 603 Sqns attacked German landing barges assembling at Paros for the final assault on Leros – the 'Malta of the Aegean'. Bf 109s and no fewer than eight Arados intercepted them. Three Beaufighters were shot down, one of which was

chased by an Ar 196 before crashing into a hillside at Lagero while on fire. Flg Off Rossner and Flt Sgt Levy were killed. Another Beaufighter crew claimed an Ar 196 shot down, but no Arado was actually lost. Bf 109s and Ar 196s broke up another attack on the barges the next day. This time there were no losses on either side.

On the 8th, Ar 196A-5 D1+IN of 4./SAGr 126 survived a battle with a number of No 603 Sqn Beaufighters near Amorgos. The Arado's backseater, Unteroffizier Walter Kleinknecht, was killed, however. The next day another A-5, 7R+IK, fell victim to Beaufighters near Stampalia while escorting a troop convoy, although its crew escaped with their lives.

On 12 November the invasion of Leros began, with Ar 196s escorting Ju 52/3ms carrying paratroopers. German air superiority was complete, although two Arados hit by ground fire sank after they landed with perforated floats. The British and Italian defenders surrendered four days later and the swastika flag was flying in the whole Dodecanese archipelago when Samos fell on the 22nd.

This required numerous new German garrisons to be maintained, however, and the SAGr 126 crews had no shortage of work.

On 4 December 1943, Beaufighters attacked a German motor boat and escorting Ar 196s near Levitha. Unteroffizier Karl Steinbrecher and Leutnant Eberhard Ahrends were forced down with engine trouble, their aircraft, D1+MK, then being strafed on the water by the Beaufighter of Sgts Bob Willis and Tommy Thompson of No 47 Sqn. Unteroffizier Hubert Thurner and Leutnant Friedrich-Karl Brunswig, flying D1+BN, tried to intervene, but they were shot down by Willis and Thompson, who claimed two floatplanes destroyed upon their return to Gambut, in Libya. Both German observers, Ahrends and Brunswig, had been killed.

Another Arado, D1+KL flown by pilot Oberfeldwebel Walter Schindler and Oberfeldwebel Otto Albrecht, landed to rescue Steinbrecher, who was slightly wounded. Unable to take off in the rough sea, Schindler began taxiing towards Leros, but his floatplane was strafed and destroyed by Beaufighters of No 252 Sqn while still almost five kilometres out and all three airmen on board were killed. Thus, SAGr 126 lost three Ar 196s in this confrontation, and pilot Thurner was the only surviving crew member.

D1+KL had been an aircraft of 3./SAGr 126, based in Leros after the Germans took the island. This *Staffel* also operated from Volos, on the mainland, in 1944. Meanwhile, 4./SAGr 126 evidently had had a flight based at Pigadia, Karpathos, for some time. A take-off accident was recorded there on 13 September 1943, and an Ar 196 was claimed damaged in the port by the submarine HMS *Seraph* after it 'popped up' in harbour during the night of 6 November and opened fire. Finally, one Ar 196 was destroyed and two more damaged in an Allied air attack on Pigadia on 6 March 1944.

On 27 January 1944, four Beaufighters of Gambut-based No 603 Sqn were flying an offensive reconnaissance mission when, west of Mykonos, they encountered three Ju 52/3m See floatplanes escorted by three or four Ar 196s of 1./SAGr 126. Civilian Mr Koukonvinis was an eyewitness to what happened next;

'The British aircraft showed up from the northwest and immediately attacked the Germans. Explosions and flashes covered the winter skies, and we all gathered to see this spectacle unfolding right before our eyes. I saw

Having floats was not always an advantage, but at least close co-operation was possible with escort vessels, such as here in the Aegean. Note the floatplane's Viking ship badge, inherited from KG 100 (*Horizonten*)

the German aircraft, one by one, falling into the sea. The roar of the engines was interrupted by machine guns firing and huge explosions. Then, silence. Only smoke could be seen on the horizon where the German aircraft had crashed at sea.'

All three Ju 52/3m See were shot down, as were two of the Arados with the loss of their crewmen. A third was slightly damaged and landed near Delos. The *Seenotdienst* reported that five crew and seven passengers from one of the Junkers survived, while 27 passengers, nine Junkers crew and four Arado crew were missing. Beaufighter LZ144 suffered engine trouble on the way home and ditched, its crew, Flt Sgt Alan Rooks and Flg Off Morris Thom, perishing at sea. Plt Off Tony Ross, the navigator of LZ133, stated that LZ144 had been seriously damaged by the Arados.

On 22 February, three Beaufighter squadrons participated in an attack on the merchantman *Livenza* between the north coast of Crete and the fortified island of Dia. According to Plt Off Ross, there was 'massive cover by Bf 109s and Ar 196s' and the target area was also in reach of heavy flak on Crete. No 227 Sqn engaged the fighter cover while No 603 Sqn attacked with rockets and cannon, followed up by No 47 Sqn with torpedoes. 'The *Livenza* sustained several hits and was later confirmed to have sunk. A corvette was set ablaze and two Arados were damaged. The cost was three Beaufighters, all of them from No 227 Sqn', noted Ross. Only one Arado was actually damaged but its backseater, Feldwebel Wolfgang Jergas, was killed. One of the lost Beaufighters, X8103, is said to have been damaged by an Ar 196. The twin-engined aircraft crashed off Chania and Flt Sgts S B Appleton and J Fenton were killed in action.

SAGr 126 lost two Ar 196s in accidents in the Dodecanese on 28 February. On 14 May, Arados were hunting a British motor boat between Anafi and Crete when they were attacked by a gaggle of Beaufighters of No 603 Sqn. Although two seaplanes were claimed destroyed and three damaged, only one seems to have been lost, resulting in the deaths of Unteroffizier Meidel and Obergefreiter Kakarutt.

Codenamed *Olivenöl* (olive oil), the last sizeable German supply convoy for the troops on Crete sailed from Piraeus on 31 May. Consisting of three steamers escorted by torpedo boats and other vessels, the convoy was attacked once within range of Spitfire and Mustang escort fighters. The RAF force of 30 Baltimores and Marauders, followed up by 30 Beaufighters, struck at 1800 hrs on 1 June. Several ships were sunk or badly damaged and two Arados and one Bf 109 were claimed shot down by British pilots. Four Beaufighters failed to return.

The Wehrmacht newspaper *Veste Kreta* published a glowing article entitled 'Dashing deed by our Arado men' in which the four Beaufighters were said to have been shot down by four Arado crews – Kurth/Böckling, Chalupka/Schäfer, Rupp/Richter and Hässler/Busse. The story was in fact a work of fiction. According to the Kriegsmarine report, there were four Bf 109s, four Ar 196s and four Ju 88s covering the convoy, with

the latter breaking off because they were 'too slow'. The even slower Arados from Souda Bay were 'partly right between the Beaufighters during their attack, but they had to bring themselves to safety due to their inferiority'.

The Kriegsmarine report went on to state that over two days, the enemy lost 'four Beaufighters, one Baltimore and one Wellington, all victims of ships' flak. During the fighting one Me 109 and three Ar 196s were shot down, and one Ar 196 damaged [by a Beaufighter from No 227 Sqn]. The damaged aircraft was an Ar 196A-5 [Wk-Nr 349]'. This naval report was all too pessimistic because at least three of the Ar 196s 'shot down' suffered hardly any damage. On 15 June, the Luftwaffe chief for commendations and disciplinary matters in Berlin assigned a victory over a Beaufighter to Arado pilot Oberfeldwebel Günter Kurth.

A Kriegsmarine party in small boats speeds out of the destroyed port of Leros to reconnoitre Samos, the last outpost in the Aegean of the Italian 'traitors of Badoglio'. With the British lacking airfields, the Ar 196s of SAGr 126 were able to play a significant role in the Dodecanese campaign (*Horizonten*)

On 17 June a Baltimore crew of No 454 Sqn RAAF sighted a convoy of German barges and *caiques* escorted by four Arados to the northwest of Falkonera. Two of the Ar 196s chased the light bomber but were outpaced. The convoy was subsequently attacked by Beaufighters of No 16 Sqn SAAF and No 227 Sqn. Three of the SAAF aircraft were shot down by flak, with one of these reportedly being finished off by Obergefreiter Schramm while flying at just 60 ft over the waves. Both Schramm's Arado and another Ar 196 were also shot down. Schramm and his observer, Unteroffizier Busse, both lightly wounded, and the other crew, Unteroffizier Paduch and Leutnant Böckling, were rescued by the German boats. Both backseaters had also been in the 1 June battle.

Two days later the former Italian destroyer *Calatafimi*, now *TA-19* in German service and escorting two ships from Leros to Rhodes, was targeted with rockets and cannon fire by No 252 Sqn Beaufighters. Australian pilot WO Bates had to break off his attack to turn into intercepting Ar 196A-5 D1+GL of 3./SAGr 126, which returned to Leros slightly damaged.

During the morning of 23 July, a gaggle of No 603 Sqn Beaufighters encountered and engaged a lone Ar 196 to the east of Mykonos. The floatplane damaged NE494, which was unable to maintain height and ditched. Flg Off Biounevalle and Flt Sgt Potter got into their dinghy safely. The Arado was hit in the nose, reportedly by Potter, and it lost oil pressure and had to alight. As the crew swam away from the aircraft, it was sunk by the remaining Beaufighters.

On 6 September, an Ar 196 of 2./SAGr 126 was damaged by enemy aircraft. Oberleutnant Rohwerder in turn claimed a Beaufighter shot down, but probably without justification. Three days later, Beaufighters of No 603 Sqn claimed two Arados shot down to the south of Milos – one Arado of 4./SAGr 126 was registered as lost by the Germans. These were some of the last aerial clashes of SAGr 126's three-year war in the Aegean Sea, for on 11 September Crete-based 4./SAGr 126 received orders to withdraw to Germany. The *Gruppe*'s other *Staffeln* left Athens-Skaramagas and Leros for home the following month.

CHAPTER SIX

WAR'S END AND FOREIGN USE

An Ar 196 patrols over Scandinavia during the last year of the war. The spiral pattern painted on the spinner was a safety feature introduced in the summer of 1944 (*Horizonten*)

Apart from the two Ar 196s in Penang, which ended up in Jakarta (see Chapter 4), Arados were still based in the western, central and eastern Mediterranean, as well as in Germany and Scandinavia, as the war in Europe entered its last year in May 1944. By then, the walls of the Führer's 'Fortress Europe' had started to collapse, however.

2./BoFlGr 196 in Venice withdrew to Aalborg in late May, and two months later, following D-Day and the Allied landings in Provence, 2./SAGr 128 was one of the German units forced on the retreat from the south of France. It then had perhaps 14 Ar 196s based at the Étang de Berre, near Marseilles, at the Étang de Leucate near Perpignan, and also at Biscarosse on the Atlantic coast. One aircraft was destroyed at the latter location because its crew was missing when it was time for 2./SAGr 128 to depart on 20 August, while a second aircraft at Perpignan had to be left behind probably because of unserviceability.

From the Étang de Berre, the seaplanes followed the Rhône and Saône rivers. One Ar 196 suffered engine damage and force-landed just north of Chalon-sur-Saône. Its crew was picked up by the other aircraft. The area was a hotbed of partisan activity, and the abandoned floatplane was photographed damaged on the river in the town. The rest of the unit reached Friedrichshafen on Lake Constance, where 2./SAGr 128 formally stood down on 26 August 1944.

In the same week, major events unfolded in Eastern Europe as the Red Army invaded Romania. King Michael I had Marshal Ion Antonescu arrested and Romania surrendered to the Allies on 23 August. The German lines collapsed and the Ploești oilfields were lost. The Soviets also entered Bulgaria early in September, and the German position in Greece was rendered both hopeless and useless.

Ar 196s of Oberleutnant zur See Paul Kriebel's *Staffel*, 4./SAGr 126, on the Danube at Vukovar, Croatia, during the unit's withdrawal to Germany. The Adriatic was no longer safe for the Ar 196s to use, so a riverine route home had to be chosen. Ground troops and personnel often had to walk all the way from Greece, but Kriebel's men managed to hitch a flight to Zagreb (*Horizonten*)

As far as the Arado wing in Greece was concerned, 4./SAGr 126 was the first *Staffel* to withdraw, receiving orders to leave Souda Bay. By September 1944, the Adriatic Sea was under Allied control, and thus the seaplanes flew to Salonica first on the 11th of that month. From there, they made an overland flight to Belgrade the following evening. On the 13th, they reached Brandenburg an der Havel, having refuelled at Vienna-Winterhafen.

The other *Staffeln* of SAGr 126 left Athens-Skaramagas and Leros in October, thus withdrawing the final Arados remaining in the Mediterranean. The last German ground troops departed Athens on the 12th, facing a long march home through partisan-infested Yugoslavia. Paul Kriebel, the *Staffelkapitän* of 4./SAGr 126 from Crete, remembered that his ground personnel had been flown to Athens in a Ju 52/3m, from where they expected to have to walk. They were, however, lucky enough to catch a flight to Zagreb, and made it home in just a week.

Arriving in Germany, the other *Staffeln* of SAGr 126 were sent to the Baltic Front at Lochstädt (Pawlowo), in East Prussia. Kriebel's *Staffel* had been disbanded, however. Some of his airmen were transferred to fighters and others to flak or infantry units according to Kriebel, who himself was posted, to his surprise, to the Ar 196 operational training *Staffel*, now named the *Ergänzungs-Küsten-Nahaufklärungs und Bordflieger-Staffel* and based in the Baltic, to train fresh Ar 196 pilots!

No matter how unworldly Kriebel's assignment may have seemed at this stage of the war, embarked aviation was still relevant according to the Kriegsmarine. Following the damage done to the superstructure of *Tirpitz* by the Fleet Air Arm in April 1944, the 'Lone Queen of the North' had been patched up sufficiently in its remote fjord to still pose a perceived threat to the British, and Ar 196s were embarked anew in early June.

In its coastal role, the Arado had supporters in high places even in the Luftwaffe. When the decision had been finalised in January 1944 to terminate production of the Ar 196, and to replace it in coastal units with twin-engined fighter type aircraft, it was *Luftflotte* 5 in Oslo that made a plea for the Arado, calling the floatplane 'exceptionally suited' to the inshore coastal patrol role in Norway. Its crews might not have agreed with this statement, however, as they were increasingly encountering enemy fighter aircraft even over Scandinavian shores.

For example, on 5 May 1944, an Ar 196A-5 was attacked by a Mosquito VI fighter to the south of Eigerøya Island, off Egersund. It was an aircraft of

No 333 (Norwegian) Sqn from Leuchars, Scotland, flown by Lt Johansen and Midshipman Helgedagsrud. A dogfight ensued, which the Norwegian airmen broke off when they came within range of a German flak position. By then they had hit one of the Ar 196's floats, which caught fire, and the Arado sank after making an emergency landing near the coast. Its crew escaped.

Three days later, there was a head-on firing engagement off Lista between an Ar 196 and another Mosquito VI of No 333 Sqn, which was hit in the nose and cockpit. Its pilot, Midshipman Jensen, was wounded. The Arado was also damaged according to the Norwegian crew.

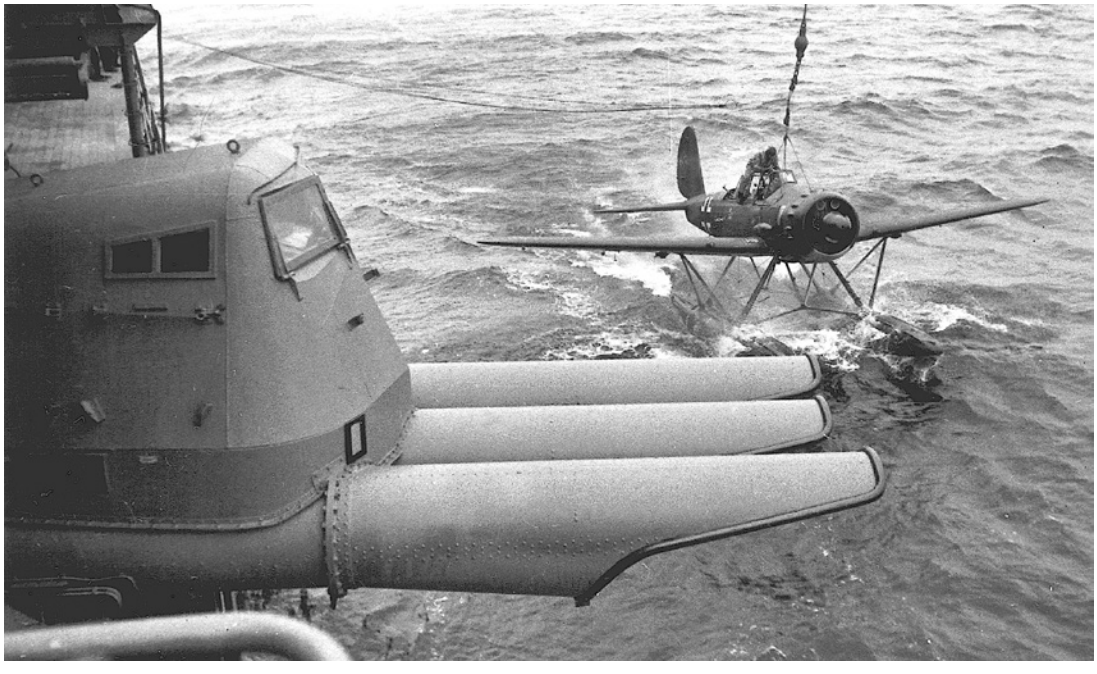
The Ar 196 that had sunk on the 5th belonged to 2./BoFlGr 196, this floatplane being an early example from the *Staffel* that was in the process of returning from Venice. It was now made responsible for equipping *Tirpitz*, as well as undertaking coastal reconnaissance and convoy escort duties in Scandinavia. Fifty-nine sorties were flown by the floatplanes assigned to *Tirpitz* during June, including 'fighter' sorties, patrol flights, reconnaissance flights for destroyers, exercise flights for air raid warning posts in the Altafjord area, target towing flights and smokescreen check flights. The last of these were occasionally flown with the battleship's commanding officer, Kapitän zur See Wolf Junge, in the back seat.

During Operation *Goodwood* (a series of Royal Navy carrier strikes against *Tirpitz*), aircraft from HMS *Indefatigable* destroyed two Arados of 2./BoFlGr 196 over the Altafjord on 22 August, and another one was lost to enemy strafing four days later. The Fleet Air Arm did not manage to sink *Tirpitz*, however. RAF Bomber Command then took over and, using Lancasters armed with huge Tallboy bombs, they eventually caused the battleship to capsize at its anchorage off the Norwegian city of Tromsø on 12 November 1944. Thereafter, the remaining few aircraft and crews of 2./BoFlGr 196 were sent to the Baltic. 2./SAGr 131, flying both BV 138s and Ar 196s from Stavanger, disbanded in December 1944, although there were still some operational Arados in Norway at war's end.

THE BALTIC – 1944-45

Fighting in the Baltic in the last months of the war, the Arado reverted to its classic, but rarely performed, role of shipboard artillery spotter. From mid-1944, 1./BoFlGr 196 equipped the remaining heavy cruisers *Lützow*, *Admiral Scheer*, *Prinz Eugen* and *Admiral Hipper* in the Baltic, although the last of these vessels was not combat ready. The Kriegsmarine's big guns mattered again now that the Soviet armies were approaching the Baltic shores. Preparing for this new and final phase of the war, 1./BoFlGr 196 moved to Pillau (Baltiyisk) in East Prussia during June, with one flight at Nest (Unieście). 2./BoFlGr 196 was based at Bug auf Rügen.

In August 1944 *Prinz Eugen,* accompanied by destroyers, sailed into the Gulf of Riga to bombard an armoured brigade of the Soviet 51st Army at Tukkum (Tukums) from a distance of 25 km (15.5 miles). Two Ar 196s were launched in the early morning of 19 August, but owing to thick ground fog, their crews were initially unable to observe the fall of shot. Despite this, the heavy cruiser's 20.3 cm shells struck right in the town square where the brigade's tanks had assembled, and the unit was wiped



T3+BL returning to *Prinz Eugen*. This particular Ar 196A-3 was involved in the successful German action at Tukkum (Tukums) in Latvia. The ship's three Arados formed a wagon wheel to ward off an attack by Soviet fighters (*EN Archive*)

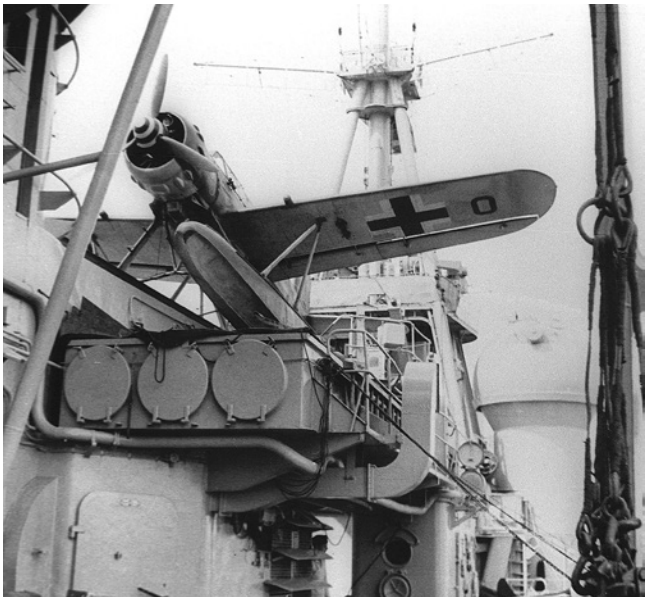
out. The ship's Arados flew a second mission later in the morning and another in the afternoon, directing fire against a gun emplacement on a hill outside the town. They also attacked retreating Soviet columns with bombs and gunfire. Eventually Soviet fighters appeared, but the seaplanes managed to escape.

Prinz Eugen and its three Ar 196s were again in action the next day, when the aeroplanes were attacked by six fighters. However, by turning into the enemy and covering each other's tails in a wagon-wheel manoeuvre, the three Arado crews successfully defended themselves and even claimed two Soviet aircraft shot down.

The Red Army reached the coast at Memel (Klaipeda) on 10 October, cutting off large numbers of Wehrmacht troops in the Courland Pocket. *Lützow* and *Prinz Eugen* were quickly called into action, with the latter alone firing almost 1200 20.3 cm shells between 10 and 15 October. The spotter Arados that supported the ships flew mostly from Pillau. The Kriegsmarine also covered the withdrawal from the island of Ösel (Saaremaa), and during the operation *Admiral Scheer*'s Arado was shot down by three Soviet fighters on 23 November. Oberfeldwebel Edward Zeissler and his observer Oberleutnant zur See Günther Telle both lost their lives.

In late January 1945, the evacuation of two million people from pockets in Courland, East Prussia and on the Pomeranian coast had begun. On the 31st, *Prinz Eugen* was bombarding Soviet troops near Cranz (Zelenogradsk) when two of its Ar 196s, T3+BH and T3+CH, were attacked by Yak fighters. Observer Oberleutnant zur See Friedrich-Wilhelm Stoll later reported;

'At 1459 two fighters come into view ahead. These are at first assumed to be Russian. As they pass, I then assume that they are two Me 109s who want to land at Neukuhren. Neukuhren field is right abeam at this moment. I continue to watch the aircraft and see them turning 1000 m behind and



When *Prinz Eugen* surrendered to the Allies at Copenhagen, two Ar 196s were on board, coded T3+FH and T3+OH. The ship was eventually allocated to the Americans following a lottery among the victors (*Horizonten*)

sandwiching me. One of the opponents I ward off with the MG 81. The second can fire unhindered and damages the elevator. During the subsequent approaches, the enemy concentrates on BH [Stoll's own aircraft] alone. One Yak-9 approaches from forward right, the other from behind left. CH continuously tries to chase off the opponent to the rear. During third approach rear opponent scored three cannon hits. No defence through MG 81 possible because hindered in aiming by steep turn. Pilot combats ahead opponent with fixed weapons. At one point he is well on target. Opponent then turns inland. Second Yak-9 follows him. Enemy ceases attacks because air battle is moving out towards sea.

'Malfunctions: Transmitter power supply unit U10/S broken down. Windows damaged. Elevator and elevator trim cable shot through, elevator lock cable shot through. Several stringers shot through. Elevator damaged.

'Having established that the engine and the floats were unaffected, we continued mission. No emergency jettisoning of bombs.'

Increasing activity by Soviet submarines, including the sinking of the former cruise ship *Wilhelm Gustloff* with more than 8000 people on board, saw the Arados operating in their familiar anti-submarine patrol role. The Ar 196 units had been withdrawn from East Prussia, with 1./BoFlGr 196 moving from Pillau to Bug auf Rügen, joining 2./BoFlGr 196, and SAGr 126 from Lochstädt to Bug auf Rügen and nearby Parow. Nothing is known of SAGr 126's tale in the Baltic, but on 30 March 1945, 1./SAGr 126 still had eight serviceable Arados out of 13 in total. 3./BoFlGr 196 had converted to BV 138s, whilst 2./SAGr 126 was converting to Me 410 fighters – none of the 11 Messerschmitts it had on strength was serviceable, and its only flyable aircraft were two Siebel Si 204s used as trainers.

The last recorded combat loss involving an Ar 196 occurred on 24 March 1945 when an A-3 of 2./BoFlGr 196 was shot down by Soviet ground fire at Stolpmünde (Ustka). Feldwebel Harald Krane and his observer Leutnant zur See Friedrich Arndt were listed as missing in action.

On 24 April, Spitfire pilots of No 41 Sqn spotted 20 Ar 196s on the shore of Lake Ratzeburg, south of Lübeck. They strafed the seaplanes and claimed most of them damaged, but could not set them on fire probably because the Ar 196s lacked fuel. It seems very likely that these Arados were put away here as the Germans no longer had the pilots and the fuel to fly them. Indeed, both 1./SAGr 126 and 2./BoFlGr 196 had been disbanded during March 1945, leaving 1./BoFlGr 196 as the very last Luftwaffe squadron to operate the Arado Ar 196 – officially until 9 May 1945. It had also been the first, almost six years earlier.

Meanwhile, the warships that were the Ar 196's *raison d'etre* had almost all been sent to the bottom. The former pocket battleships *Admiral Scheer* and *Lützow* were both sunk by air attacks in April, and *Admiral Hipper* damaged and scuttled at Kiel. Apart from the light cruiser *Nürnberg*, the sole large Kriegsmarine warship still floating was *Prinz Eugen*. It was surrendered to the Royal Navy at Copenhagen on 8 May, with two Ar 196s, coded T3+FH and T3+OH, still on board.

Northwestern Germany became the British occupation zone after VE Day, and the German aircraft collected here included around 12 Ar 196s at List auf Sylt, Kiel-Holtenau and Schleswig-See. In addition, four were found in Denmark, plus the two on board *Prinz Eugen*, and 12 in Norway. Some 20 Arados, reported to be in good condition, were also captured by British forces at Tarnewitz on the Baltic coast. Tarnewitz ended up in the Soviet zone, however, and these aircraft were given to the Red Army according to agreements made at the Yalta Conference held three months earlier.

In 1940, the British had missed an opportunity to test-fly an Ar 196 when a captured aircraft flown back from Norway crashed shortly after it reached Scotland (see Chapter 2). By 1945, the Ar 196 was of limited interest, of course, especially in comparison to the German wonder weapons like the Ar 232 Blitz, to name another Walter Blume design. Nevertheless, two Ar 196s from Schleswig were flown to the MAEE at Felixstowe, in Suffolk, and allocated serials VM748 and VM671. Both floatplanes soon ended up on the scrapheap, however.

Prinz Eugen was amongst three lots of naval prizes to be divided between Britain, the United States and the Soviet Union. Although each victor wanted the heavy cruiser, it was won by an American representative, literally in a lottery involving three pieces of paper in a hat! A largely German crew transferred USS *Prinz Eugen* to Boston, Massachusetts, in January 1946, with two Arados still on board. Both were flown in the USA, and one made the Ar 196's last catapult take-offs from the Naval Air Material Center at Mustin Field, Philadelphia. Restoration of this Ar 196 by the National Air and Space Museum began in 2010. After decades of external display, the other example was shipped back to Germany in 2012 for restoration at the Aeronauticum museum at Nordholz.

PO+HO was captured by British forces at Kiel, this late-production Ar 196A-5 having been built by Fokker at Amsterdam and ferried to Nest on 1 August 1944 for use by the Ar 196 operational training *Staffel* (*Horizonten*)

ROGUE ARADOS

Two Ar 196s landed in neutral Swedish waters during the war after malfunctions or navigational errors. The second of these, DF+QS of the E-Stelle Travemünde, was quickly given back in 1944, but the first, DH+ZF of the Ar 196 operational training unit, was put into storage at Karlskrona-Stumholmen seaplane base after alighting at Karlshamn on 11 February 1943. When put up for sale in January 1945, the aircraft was bought by Maj John Turner, a British MI6 agent, who ran a chain of observation posts in the Swedish mountains that looked into German-occupied Norway. A Waco biplane used to reach the remote sites had crashed, and the Arado was to be its replacement. Bought by Turner with his own money, it was registered SE-AOU on 27 April 1945. By then, of course, the war was nearly over.

Maj Turner was having some issues with the Swedish authorities, and he had his floatplane flown to Oslo without their permission on 27 May 1945. He billeted it with the RAF's No 8801 Air Disarmament Wing, and the aircraft was adopted by Sunderland-equipped No 330 (Norwegian) Sqn, which arrived in Norway from Britain in mid-June 1945. Rudimentary RAF roundels were replaced by Norwegian ones. No 8801 Air Disarmament Wing, tasked with dismantling German equipment, now wanted to scrap the Arado, but it was still Turner's property and he managed to sell it back to Sweden in the summer of 1946. As SE-AWY, it was then used for target towing on behalf of the Swedish navy until August 1947, when it crashed into the sea off Karlskrona.

One of the Ar 196s borrowed by the Finnish air force (see Chapter 5) saw some action against its former owners. In the summer of 1944, with the Red Army advancing in Karelia, the Finns realised their alliance with Germany was not going to bring back the territories lost in the Winter War of 1939-40. A ceasefire came into effect on 4 September 1944. Interestingly, the very last operational flight of the so-called Continuation War was flown by one of the two Ar 196s of Detachment Jauri, dropping the news of the armistice to the bush patrol led by Sgt Muisto Lassila on 7 September.

The aircraft involved in this mission was likely A3+AC, because the other Arado in the markings of KG 200, A3+BC, was given back to the Luftwaffe that same day. A3+BC then headed north to join the Wehrmacht's Lappland Army, although it crashed into Lake Toramolampi near Rovaniemi on 9 September. Its German pilot, Feldwebel Heinz Adamsky, drowned.

The conditions of the Moscow Armistice required the Finns to disarm or expel all German troops from their territory, which they did without enthusiasm in the Lapland War. The retained Ar 196, A3+AC, was used in the operation against the former brothers in arms from 1 October until early November, when the lakes froze over. German markings were obviously removed and a fake civil registration, OH-PMK, applied to make the Arado look like a regular Finnish aircraft because any German property was going to be seized by the Soviets. An He 115 was similarly painted as OH-PMJ. This failed to fool the Soviet inspectors, however, and both seaplanes were dismantled and transported off to Leningrad by train.

ROMANIA AND BULGARIA

Despite the above oddballs, the Ar 196 saw foreign – i.e. non-German – use on a substantial scale with just two countries, Bulgaria and the Soviet Union. Some readers will probably be disappointed to find no photos of Arados wearing Romanian markings, as is often shown in artwork. However, the Ar 196 never actually entered Romanian service and no photograph has surfaced of the type in Romanian colours. Romania did order the type, and reportedly 24 were delivered to Constanța in crates in the summer of 1944. They are described as A-3s, but quite possibly they were Fokker-built Ar 196A-5s. Only two were unboxed and allegedly test-flown before the Soviet breakthrough of August 1944 threw Romania into chaos. Constanța and the Mamaia seaplane base at Lake Siutghiol were occupied by the Soviets, and the 22 Ar 196s still in crates were captured. While Romania's He 114s remained in service under the communist regime, the Arados were confiscated and likely put in service with the Soviet Border Troops Air Arm.

Deliveries of Ar 196s to Bulgaria preceded those to Romania by more than a year, which is rather surprising given the fact that the country joined the Axis powers in 1941, but did not join the war against the Soviet Union. Romania received the inferior He 114 at about the same time Bulgaria was offered, in a letter from Luftwaffe high command dated 29 July 1942, the opportunity to buy 12 Ar 196s. At that time, Bulgaria did not have dedicated maritime aircraft, relying instead on obsolete Czech Letov Š-328 biplanes for coastal reconnaissance not only over the Black Sea, but also the Aegean during the second half of 1941 after it occupied parts of Greece.

161 Coastal Yato (Squadron) of the Royal Bulgarian Air Force was officially raised in September 1942 at the Chaika (Seagull) base in the Black Sea port of Varna. Then named Pejnerdjik, this had been a German seaplane base in

The Ar 196 was given the name Akula (shark) in Bulgaria. Although the country refused to participate in the war against the Soviet Union, it did join the Axis powers. To ease recognition issues, a black St Andrew's cross – an X-shaped variation on the German *Balkenkreuz* – was adopted as the national insignia (*Horizonten*)

World War 1 and it was also used by the Luftwaffe in the current war. The new unit had 43 personnel under Capt Russi Kolarov, and it received two Heinkel He 42 Patista (Duck) and two He 60 Tuylen (Seal) floatplanes for training. The Ar 196 received the name Akula (Shark). Two pilots, Alexander Toromanov and Boris Tsanev, were sent to Germany to train on the type.

Staging through Walther Bachmann Flugzeugbau at Ribnitz-Damgarten, 12 newish Ar 196A-3s arrived in Bulgaria in April 1943. They were soon flying escort missions on behalf of Bulgarian shipping, which was sometimes attacked by Soviet forces in the Black Sea.

On 1 September 1944, ten Akulas were operational with the coastal reconnaissance squadron, now designated as the Seaplane Yato and based at Burgas. A week later the Red Army entered Bulgaria without a shot being fired, and the communists seized power in Sofia. The seaplane unit was grounded for a few weeks, then retook to the air on the Allied side with new insignia replacing the Bulgarian take on the German crosses. There was no more fighting in the Black Sea, however.

On 8 September, pilot Ivan Detchev and observer Radoslav Boyadjiev took off in an Ar 196 and made for Istanbul, where they were interned by the Turkish authorities. The Arado was returned in 1946 in exchange for a Turkish Spitfire that had come down in Bulgaria.

During 1945 the Seaplane Yato assisted minesweeping operations. The unit was transferred from the air force to the Bulgarian navy in 1947. During the summer of 1948, the Arado crews undertook a series of reconnaissance missions along the Turkish Black Sea coast, taking photos from low altitude especially between the Zunguldak naval base and the Bosporus. This operation should perhaps be viewed in the light of the onset of the Cold War – another new national marking, involving a red star, was painted on the Ar 196s in 1949. The last new pilots assigned to fly the Arados reached the frontline in 1951, including, remarkably, two women, Mika Goranova and Sijka Tsoncheva.

By now decidedly obsolete, the Teutonic floatplanes were being used in a new role by 1953 – protection and support of the Bulgarian fishing fleet. Maintenance became increasingly difficult, however, and the last Arados were retired in 1956. One was preserved at the Naval Museum in Varna. Almost destroyed as a 'fascist artefact', it went to the new aviation museum at Krumovo, near Plovdiv instead, where it has been on display since 1991.

SOVIET BORDER TROOPS AIR ARM

Two years before the Bulgarians, the Soviet Union very nearly became the first regular foreign user of the Ar 196 when, during the period of the German-Soviet alliance, it bought the fifth heavy cruiser in the *Admiral Hipper* class for a whopping 150 million Reichsmarks. Four Ar 196s were included in the deal, to allow the Soviets to build experience with the German catapult system without losing time.

The unfinished warship was towed to Leningrad in April 1940, and four new Ar 196A-3s (Wk-Nrs 152 to 155) were taken over by Soviet representatives at the Warnemünde factory on 27 May 1941. Four weeks later, they were on board the Soviet timber freighter *Volgoles* when it was seized by the Germans at Stettin (Szczecin) on 22 June – the day Operation

Barbarossa was launched The Arados were redelivered to the Luftwaffe. The heavy cruiser, renamed *Petropavlosvk*, was never completed.

By the time the Red Army occupied Eastern Europe in 1944-45, Soviet aviation was thus familiar (because of the earlier purchase) with the Ar 196, examples of which had also been encountered in modest numbers in the Baltic and Black Sea theatres. Some 22 factory-fresh Romanian Ar 196s were captured at Constanța in August 1944. Another 20 Arados were transferred to communist control by the British at Dassow in the spring of 1945, having been captured at Tarnewitz which was in the Soviet occupation zone. The seaplane was now available in sufficient numbers to revive Soviet interest in the type, this time not from the navy but from the Border Troops Air Arm. The latter fulfilled patrol, liaison and light transport duties along the Soviet Union's extensive borders, and in 1945 it still relied on antiquated MBR-2 and Shavrov Sh-2 light flying boats for operations over the maritime borders.

A Soviet pilot poses with his Ar 196 at Pillau, or Baltiyisk as it became after the war. In the Russian Far East, the Ar 196 remained in service in sizeable numbers with the Soviet Border Troops Air Arm until 1955 (*Horizonten*)

Along with other captured Ar 196s, the floatplanes from Dassow were sent to the Walther Bachmann company at Ribnitz-Damgarten, which had been an Ar 196 repair facility. Stocks of spare parts were probably found here too. Test pilot Maj Ozorov arrived from Moscow to undertake two flights with a German pilot, after which he carried out test flights in 18 machines refurbished at Ribnitz-Damgarten by local engineers and mechanics. Ozorov also trained the first six Border Troops Air Arm pilots on the type. One Arado was flown to Moscow, alighting at the Khimki Reservoir for inspection by high-ranking security officials – the Border Troops were part of the NKVD (People's Commissariat for Internal Affairs).

Useful documentation and tools collected in Germany were carried off to the Beriev works at Taganrog. According to author Vladimir Kotelnikov, a total of 37 Ar 196s were eventually fitted with Soviet instruments, radios and guns – a number that might account nicely for the Romanian aircraft.

Thus the Arado Ar 196 has the distinction of being the only German aircraft type to see significant Soviet service after World War 2. The Ar 196s served in the Baltic, Black Sea and Russian Far East, and the aircraft destined for the last of these areas were delivered by train, along with 62 engines and 30 spare floats. This load required 86 carriages. The main base here was Uglovoye, near Vladivostok. The wreck of a Soviet Ar 196 was found near the Malka hot springs on the Kamchatka peninsula in 2003.

Because of an anticipated shortage of BMW 132K radials, an installation was designed at OKB-30 for the Shvetsov Ash-62IR radial, developed from the old Wright R-1820 Cyclone and close enough in weight and dimensions to the BMW 132. One prototype was converted, and this became the one and only Ar 196 to have flown with another powerplant other than the trusty Bavarian radial engine. In the end, plenty of BMW 132Ks turned out to be available, from Ju 52/3ms and other sources, to keep the Arados flying. The last Soviet Ar 196s were not retired until 1955 in the Russian Far East, apparently just before the last Bulgarian example.

APPENDICES

APPENDIX A

SUMMARY OF GERMAN Ar 196 *STAFFELN*

1939-43	1943-45
10./*Lehrgeschwader* 2 Carried out Ar 196 sea trials in 1939. Testing was also carried out by the *Erprobungsstelle* (*See*) at Travemünde.	
1./*Bordfliegergruppe* 196 Large embarked air *Staffel*, equipping mainly heavy warships. Based at Wilhelmshaven, and from 1943 at Aalborg. Coastal patrol role in various detachments in Norway, Holland (1940-41), Baltic Front (1941-42), Bay of Biscay (1942) and Sicily (1943). Search and rescue role in Battle of Britain (1940). Withdrawn to Baltic June 1944. Disbanded May 1945.	
	2./*Bordfliegergruppe* 196 Raised summer 1943. Sent to Italy in coastal role. Withdrawn to Aalborg May 1944 to equip *Tirpitz* in Norway. Withdrawn to Baltic November 1944. Disbanded March 1945.
	3./*Bordfliegergruppe* 196 Existed 1943-44 with Fa 330 and Fl 282 experimental rotorcraft and Ar 196s at Kiel.
5./*Bordfliegergruppe* 196 Second embarked air *Staffel*, equipping mainly light cruisers and auxiliary cruisers. Based at Kiel, and from 1941 at Brest. Coastal patrol role in Denmark and Norway (1940) and Bay of Biscay (1940-43).	**2./*Seeaufklärungsgruppe* 128** 5./BoFlGr 196 became SAGr 128 June 1943. 2./SAGr 128 with Ar 196s sent to French south coast. Withdrawn and disbanded August 1944.
1./*Küstenfliegergruppe* 706 Equipped with He 115s and Ar 196s at Aalborg June 1940. To Stavanger with BV 138s and Ar 196s September 1942.	**2./*Seeaufklärungsgruppe* 131** 1./KüFlGr 706 was briefly redesignated 1./SAGr 130 before becoming 2./SAGr 131 July 1943. Disbanded December 1944.
	1./*Seeaufklärungsgruppe* 131 BV 138 *Staffel* 2./KüFlGr 406 at Trondheim, was briefly redesignated 3./SAGr 130 before becoming 1./SAGr 131 July 1943. Received an Ar 196 flight. To Black Sea with BV 138s only January 1944.
8. *Seenotstaffel* Operated some Ar 196s in coastal patrol role in Black Sea 1941-42. Based at Constanța-Mamaia.	
10. *Seenotstaffel* From summer 1942 air-sea rescue unit in northern Norway operated some Ar 196s for *Sumpfnotdienst* (swamp rescue service) in northern Finland. For other Ar 196 flights in Finland see Chapter 5.	**5. *Seenotstaffel*** 10. *Seenotstaffel* was replaced by 5. *Seenotstaffel* in northern Norway September 1943.
	1./*Seeaufklärungsgruppe* 125 Sent to Black Sea July 1943 with BV 138s and an Ar 196 flight. Ar 196s likely transferred to 2./SAGr 125 in December 1943.
2./*Aufklärungsgruppe* (*See*) 125 Raised April 1941 and partly equipped with Ar 196s for Baltic Front. Sent to Black Sea with Ar 196s November 1941. Based at Souda Bay, Crete, from February 1942.	**4./*Seeaufklärungsgruppe* 126** 2./AufklGr 126 (*See*) became 4./SAGr 126 in 1943. Withdrawn to Germany and disbanded September 1944.
	2./*Seeaufklärungsgruppe* 125 New 2./SAGr 125 raised with Ar 196s at Sevastopol in December 1943. Withdrawn and disbanded June 1944.

	3./*Seeaufklärungsgruppe* 125 BV 138 *Staffel* in Black Sea had an Ar 196 flight by March 1943. Ar 196s likely transferred to 2./SAGr 125 in December 1943.
1./*Aufklärungsgruppe* (*See*) 126 **2./*Aufklärungsgruppe* (*See*) 126** **3./*Aufklärungsgruppe* (*See*) 126** *Gruppe* raised April 1941 and sent to Greece May 1941 with He 60s and one Ar 196 flight, which was diverted to 8. *Seenotstaffel* in Black Sea. *Gruppe* re-equipped with Ar 196s in 1942. Was officially designated III./KG 100 for some time. Based at Athens-Scaramagas and elsewhere in Greece.	**1./*Seeaufklärungsgruppe* 126** **2./*Seeaufklärungsgruppe* 126** **3./*Seeaufklärungsgruppe* 126** *Gruppe* renamed SAGr 126 in 1943. Withdrawn to Baltic in October 1944 and disbanded between March and May 1945. (SAGr 126 also included 4./SAGr 126 at Souda Bay, formerly 2./AufklGr (*See*) 125).
3.(*Bordflieger*)/*Flieger-Ergänzungsgruppe* (*See*) Operational training *Staffel* raised at Aalborg with Ar 196s and He 114s August 1940. Renumbered 4./(*Bordflieger*)/FlErgGr (*See*) in February 1941. Based at Kamp from May 1941. Ar 196s were also flown by the advanced seaplane flying school at Pütnitz, and by the seaplane weapons school at Parow.	***Ergänzungs-Küsten-Nahaufklärungs und Bordfliegerstaffel*** 4./*Bordflieger*)/FlErgGr (*See*) renamed October 1944.

APPENDIX B

Ar 196 PLAUSIBLE AIR-TO-AIR VICTORIES

This list should not be treated as final, but in the following cases an aircraft was downed by Ar 196 crews with certainty, or a high degree of probability.

Date/Area	Unit/Pilot/Crew/Airframe	Victim
15 August 1940 English Channel	1./BoFlGr 196 Oberleutnant zur See Gerrit Wiegmink (pilot) T3+DH (Wk-Nr 0068)	No 266 Sqn RAF Sgt Hawley Spitifre I N3189
1 July 1941 Terschelling Island	*1./BoFlGr 196* Oberleutnant *Stav* (*pilot*) Oberfeldwebel Stürtz (observer) T3+LK (Wk-Nr 0151)	No 7 Sqn RAF Flg Off Kinnane and crew Stirling I N6013
2 July 1941 Vilsandi Island	2./AufklGr (*See*) 125	Soviet Navy MBR-2
4 August 1941 Black Sea	8. *Seenotstaffel*	Soviet Navy MBR-2
6 October 1941 Black Sea	8. *Seenotstaffel*	Soviet Navy MBR-2 or MDR-6
2 January 1942 Le Tréport	1./BoFlGr 196	No 602 Sqn RAF Kaptein Jens Schjelderup Hertzberg Spitfire VB P8722
21 June 1942 Bay of Biscay	5./BoFlGr 196	No 10 Sqn RAAF Flt Lt Judell and crew Sunderland III W3999
14 July 1942 Bay of Biscay	5./BoFlGr 196	No 172 Sqn RAF Wellington
13 August 1942 Bay of Biscay	5./BoFlGr 196	No 77 Sqn RAF Flt Lt Ralston and crew Whitley Z9461
3 January 1943 Agios Georgios Island	AufklGr (*See*) 126	No 14 Sqn RAF Capt Young and crew Marauder IA FK375

29 January 1943 Morlaix	Oberleutnant Heinz Wurm (pilot) 5./BoFlGr 196 (shared with flak)	No 226 Sqn RAF Boston
29 October 1943 Amorgos Island Naxos Island	Oberfeldwebel Stahlbohm (pilot) 2./SAGr 126	No 47 Sqn RAF Flg Offs Dixon/Terry Beaufighter X JM225
6 November 1943 Paros Island	SAGr 126	No 47 Sqn RAF Flg Off Rossner/Flt Sgt Levy Beaufighter X JM352
27 January 1944 Mykonos Island	SAGr 126	No 603 Sqn RAF Flt Sgt Rooks/Flg Off Thom Beaufighter X LZ144
22 February 1944 Chania	SAGr 126	No 227 Sqn RAF Flt Sgts Appleton/Fenton Beaufighter VIF X8103
1 June 1944 Dia Island	Oberfeldwebel Günter Kurth (pilot) SAGr 4./126	Beaufighter
17 June 1944 Falkonera	Obergefreiter Schramm (pilot) SAGr 126 (shared with flak)	No 16 Sqn SAAF Beaufighter X
23 July 1944 Mykonos Island	SAGr 126	No 603 Sqn RAF Flg Off Biounevalle/Flt Sgt Potter Beaufighter X NE494

COLOUR PLATES

1

Ar 196A-0 D-IYFS (Wk-Nr 2586) of 10. (*See*)/LG 2, *Gneisenau*, Baltic Sea, Germany, spring 1939

Early Ar 196s – at least 12 machines altogether – wore civil registrations even after the new Arado monoplane had been selected as the next *Borderkunder* for the Kriegsmarine's warships. The aircraft were painted RLM Hellgrau (light grey) overall. By the spring of 1939, a seaplane *Staffel* of the Luftwaffe's LG 2 evaluation *Geschwader* had been put in charge of the testing, and this pre-production Ar 196A-0 displays 10. (*See*)/LG 2's anchored badge. A D/F loop antenna is fitted on the dorsal spine, this navigation aid usually being housed within the small dome under the fuselage.

2

Ar 196A-0 L2+X41 (Wk-Nr unknown) of 10. (*See*)/LG 2, *Admiral Graf Spee*, Lisbon, Portugal, 7 May 1939

The Ar 196's Atlantic seaworthiness trials took place rather belatedly during a large Kriegsmarine exercise in the Central Atlantic in the spring of 1939. The outside world got its first glimpse of the type when L2+X41 was photographed on board *Admiral Graf Spee* in the English Channel. Sister ship *Admiral Scheer* was carrying a central-float Ar 196B-0. This machine was one of at least seven Ar 196A-0 pre-production aircraft. Its fate is not known.

3

Ar 196A-1 T3+AH (Wk-Nr 0014) of 1./BoFlGr 196, *Admiral Graf Spee*, Central Atlantic, September 1939

The *Admiral Graf Spee* went to war with the very first operational Ar 196, sailing in August 1939 before the new floatplane's official entry into service. A second aircraft was carried by sister ship *Deutschland*. The standard splinter camouflage scheme for maritime aircraft was applied, with RLM 72 and RLM 73 dark green tints on the upper surfaces and RLM 65 pale blue on the undersides. The code identified *Admiral Graf Spee*'s Ar 196 as aircraft A of 1./BoFlGr 196, which initially used the '*Staffel*' letter H only, although the 'wing' code T3 was also unique to 1./BoFlGr 196 until 1943. This floatplane helped *Admiral Graf Spee* evade the British heavy cruiser *Cumberland* on 11 September 1939.

4

Ar 196A-1 T3+AH (Wk-Nr 0014) of 1./BoFlGr 196, *Admiral Graf Spee*, South Atlantic, October 1939

While a spare engine was being installed in *Admiral Graf Spee*'s Arado, the aircraft's markings were changed in line with the deceptive practices used by the German raiders, especially in the southern oceans. Swastikas were removed, and while the regular Luftwaffe crosses were retained on the upper wing surfaces, those on the fuselage were reduced to dashes and the underwing markings replaced by fantasy roundels in pale blue, grey and blue, which could be misidentified as French, British or even Argentine by a merchantmen or foreign naval vessel. Unfortunately for *Admiral Graf Spee*, the spare engine developed cracks on 8 November and the aircraft finally broke down on 11 December, just before the vessel ran into a British cruiser squadron off the mouth of the River Plate.

5
Ar 196A-2 6W+IN (Wk-Nr 0056) of 5./BoFlGr 196, Aalborg-See, Denmark, May 1940

The cannon-armed Ar 196A-2 was operational with the two embarked *Staffeln* when the Germans invaded Norway in April 1940. 5./BoFlGr 196 used the unit code 6W and the squadron letter N, while its Hanseatic cog ship badge was usually carried on the noses of its Arados. Days after the conquest of Denmark, the *Staffel*'s non-embarked aircraft deployed to Aalborg for anti-submarine patrols, leading to the capture of the damaged British submarine *Seal* in the Kattegat on 5 May. 6W+IN, the mount of Heinz Böttcher and Günther Mehrens that day, was marked with a kill symbol on its tailfin. The victorious crew were posted missing in action in another aircraft less than two weeks later.

6
Ar 196A-2 T3+BK (Wk-Nr 0069) of 1./BoFlGr 196, *Scharnhorst*, Norwegian Sea, June 1940

T3+BK was one of three machines embarked on board *Scharnhorst* during Operation *Juno*, which culminated in the sinking of the carrier *Glorious*. Putting in at Trondheim for repairs, *Scharnhorst* transferred T3+BK to the light cruiser *Nürnberg*, which took it to Narvik. The aircraft arrived back at Wilhelmshaven on 26 July. It crashed at Amsterdam-Schellingwoude, where the Ar 196 was then based, on 7 October 1940. The pilot, Feldwebel Walter Jakobsen, and observer Leutnant zur See Eberhard Stelter were killed. A large unit, 1./BoFlGr 196 used both the '*Staffel*' letters H and K. Individual aircraft letters prefixing K were applied in red, which in the Luftwaffe was usually the colour assigned to the second *Staffel* in a *Gruppe*. The unit badge was usually worn on both sides of the nose, with the seahorse always facing in the direction of flight.

7
Ar 196A-2 CK+FF (WK-Nr 0091), coded 57, of 3./(*Bordflieger*)/FlErgGr (*See*), Aalborg-See, Denmark, September 1940

An operational conversion *Staffel* for the embarked air *Staffeln* was created with Ar 196s and He 114s in August 1940. Initially based at Aalborg-See, the unit had a limited operational tasking, flying on behalf of 1./ KüFlGr 706 – a coastal reconnaissance *Staffel* partly equipped with Ar 196s. CK+FF was given the KüFlGr 706 tactical code 6I+EL. Repaired after an accident, this airframe was sent to 8. *Seenotstaffel* at Mamaia on the Romanian Black Sea coast. On 6 October 1941 it clashed with two Soviet MBR-2 or MDR-6 flying boats, one of which was confirmed shot down. The Arado's observer was wounded during the action.

8
Ar 196A-2 T3+DH (Wk-Nr 0068) of 1./BoFlGr 196, Boulogne-sur-Mer, France, 15 August 1940

A large *Teilstaffel* (partial *Staffel*) of 1./BoFlGr 196 suddenly found itself flying in a rescue role during the Battle of Britain, stationed in the small seaport of Boulogne-sur-Mer. On 15 August 1940, *Staffelkapitän* Wiegmink himself chalked up the Ar 196's first aerial victory when he shot down a Spitfire of No 266 Sqn and claimed another damaged over the Strait of Dover. His observer was killed, however, and the Arado crashed into the sea. Wiegmink was rescued by a German R-Boot. He became the *Gruppenkommandeur* of BoFlGr 196 in 1943, and was killed flying his unit's staff W 34 when it was shot down by a Mosquito near Randers, in Denmark, in March 1944.

9
Ar 196A-1 (Wk-Nr 0029) of 5./BoFlGr 196, *Widder*, North Atlantic, June 1940

Widder was one of the first German merchantmen converted into an auxiliary cruiser, sailing as a raider in May 1940. Cutting his cruise short because of engine problems, Kapitän zur See Helmuth von Ruckteschell sank or captured ten ships using methods that subsequently saw him convicted of war crimes in 1946. *Widder*'s Arado wore full French naval markings. The aviation officer and pilot was Konrad Hoppe, while the name of the other aviator on board is not known. Hoppe was again von Ruckteschell's aviation officer during the first voyage of *Widder*'s replacement, the raider *Michel*. Ending up in Japan, Hoppe was sent to Malaysia to command the German U-boat base on Penang (see Chapter 4).

10
Ar 196A-2 T3+BH (Wk-Nr unknown) of 1./BoFlGr 196, *Admiral Scheer*, South Atlantic, January 1941

Like other Ar 196s on board the Kriegsmarine's heavy units, the aircraft of *Admiral Scheer* was seriously damaged by the blast of the ship's own guns during the vessel's raiding voyage of 1940-41. Patched up, the Arado was painted pale blue overall. The colour prescribed for the raider aircraft appears to have been Kriegsmarine rather than RLM *Hellblau*. In the case of *Admiral Scheer*'s floatplane, British Cellon paint was reportedly used. The aircraft crashed on 18 January 1941, but was repaired with spare wings and floats received from a supply ship at sea. Pilot Feldwebel Wilhelm Gallinat and observer Oberleutnant zur See Ulrich Pietsch subsequently continued to fly the battered Arado until the end of the voyage. Like Karl-Adolf Schlitt, who replaced him as *Admiral Scheer*'s aviation officer, Pietsch became a U-boat commander later in the war.

11
Ar 196B-0 SD+BV (Wk-Nr unknown) of 1./BoFlGr 196, Heiligenhafen, Germany, 1941

Although found to be easier to handle during landings on the open sea, the central-float-with-outriggers Ar 196B was rejected in favour of the twin-float Ar 196A. Early operational experience cast doubts on the wisdom of this decision, and in 1941 the three Ar 196B-0 pre-production aircraft, then in use as trainers, underwent a brief re-evaluation with 1./BoFlGr 196. SD+BV was photographed in this hybrid paint scheme at Heiligenhafen, near Lübeck, a location used by Luftwaffe seaplane schools. It may have been captured on film whilst in the process of being repainted, without a swastika on the tailfin, but with the seahorse badge of 1./BoFlGr 196 in its usual position just aft of the engine cowling. The re-evaluation effort did not produce any tangible results, and the three Ar 196B-0s resumed their training duties.

12
Ar 196A-2 6W+AN (Wk-Nr 0080) of 5./BoFlGr 196, *Admiral Hipper*, North Atlantic, February 1941

In theory, 1./BoFlGr 196 was responsible for equipping the Kriegsmarine's heavy units, while 5./BoFlGr 196 embarked aircraft on board the light cruisers and auxiliaries. This division, however, was not always strict, and the heavy cruiser *Admiral Hipper* welcomed 5./BoFlGr 196 crews and aircraft on board on several occasions. For example, on 1 February 1941 three Arados from 5./BoFlGr 196, based at Cherbourg, embarked on *Admiral Hipper*, which had put in at Brest, for a new mission. On 11 February the

warship sank the British steamer *Iceland*, but Ar 196A-2 6W+AN was damaged on the catapult by the gun blasts and put out of action for the remainder of the cruise, which ended at Brest again on the 14th. The aircraft was eventually written off in a training accident in 1942.

13

Ar 196A-2 T3+IH (Wk-Nr 0052) of 1./BoFlGr 196, *Bismarck*, North Atlantic, 27 May 1941

Bismarck embarked four Ar 196s of 1./BoFlGr 196 for what was destined to be its only combat cruise, Operation *Rheinübung*, in May 1941. An Ar-196A-3, T3+MK, and an A-2, T3+AK, were taken on board in the Baltic Sea, while A-2 T3+IH and A-4 T3+DL departed from Wilhelmshaven. Although the floatplanes did not get to fly at all owing to the bad weather, following the sinking of the battleship *Hood*, Swordfish torpedo-bombers did manage to leave the deck of the carrier *Ark Royal* and inflict limited but crucial damage to *Bismarck*'s steering. More than 2000 men lost their lives when the ship sank on 27 May, including four pilots, four observers and nine mechanics of 1./BoFlGr 196. The four Ar 196s also went to the bottom.

14

Ar 196A-3 T3+LK (Wk-Nr 0151) of 1./BoFlGr 196, *Prinz Eugen*, North Atlantic, May 1941

Despite plans to assemble a powerful fleet squadron for Operation *Rheinübung*, in the end, only *Prinz Eugen* accompanied *Bismarck*. The heavy cruiser survived the voyage to put in at Brest on 1 June, still carrying the two Ar 196A-3s and one A-2 that had been taken on at Kiel on 4 April. T3+LK (Wk-Nr 0151) also embarked on *Admiral Hipper* and *Lützow* several times during 1942, but this did not result in any notable action. The aircraft spent 1943 on shore-based duty, flying from 1./BoFlGr 196's base at Aalborg until 9 October 1943 when, during a twilight landing following a search and rescue mission, it hit a steamer moored at Aalborg with its port wing and capsized. Pilot Oberfeldwebel Helmut Seeber lost his life in the accident, while his observer, Leutnant zur See Karl Brendel, was injured.

15

Ar 196A-3 D1+GL (Wk-Nr unknown) of 3./AufklGr (*See*) 126, Athens-Skaramagas, Greece, 1942

The largest Ar 196 unit was *Aufklärungsgruppe* (*See*), later *Seeaufklärungsgruppe*, 126 at Skaramagas on the west side of Athens between May 1941 and October 1944 – the *Gruppe* also used various other ports throughout Greece during the course of the war. Protecting Axis convoys against submarines was the *Gruppe*'s core business. The *Staffel* colour of 3./AufklGr (*See*) 126 was yellow, and aircraft G also wears the white Mediterranean theatre band. The underside panels are also painted yellow in an effort to reduce the chances of being hit by friendly fire. The history of this airframe is not known, although it was photographed during 1942 carrying the unit badge of a figure in pyjamas looking through a telescope. This insignia was not often seen on the Ar 196.

16

Ar 196A-3 7R+HK (Wk-Nr 0201) of 2./AufklGr (*See*) 125, Souda Bay, Crete, 27 December 1942

This aircraft was assigned to 2./AufklGr (*See*) 125 on 7 November 1941 as this *Staffel*, until then operating in the Baltic, was re-formed as an all-Ar 196 unit. Briefly based at Akkerman, near Odessa, 2./AufklGr (*See*) 125 soon moved to Souda Bay, Crete, where it would stay until war's end, eventually becoming the fourth *Staffel* of SAGr 126. The squadron's emblem was initially a shark speared by a bird. On 27 December 1942 this machine crashed into the sea off Dia, a small island to the north of Crete, and pilot Unteroffizier Friedrich Bach and observer Oberfeldwebel Ernst Kabisch were both killed.

17

Ar 196A-3 T3+LH (Wk-Nr unknown) of 1./BoFlGr 196, *Tirpitz*, the Altafjord, Norway, June 1943

This aircraft was festively marked for the 100th catapult take-off from *Tirpitz*, performed by Unteroffizier Meissner and Oberleutnant zur See Wilhelm Rosenbaum, then the battleship's new first aviation officer, around 1 June 1943. Although *Tirpitz* spent most of the war tucked away in Norwegian fjords, a complete Arado flight was maintained in readiness with the ship. Airframes were frequently changed, but this Ar 196A-3, T3+LH, was a regular guest on board. Indeed, it was embarked during operations *Sportpalast* and *Rösselsprung*, aimed at targeting Allied convoys bound for Murmansk in March and May 1942. The aircraft was flown off to Trondheim soon after the 100th launch, on 3 June 1943, and did not return to the ship.

18

Ar 196A-3/5 7R+AK (Wk-Nr 0240) of 4./SAGr 126, Souda Bay, Crete, 3 August 1943

By the summer of 1943, the shark in the *Staffel* badge of 2./SAGr 125 had been changed to a fleeing lion on a white shield. The 7R codes and red *Staffel* colour remained unchanged when it became 4./SAGr 126. Encounters with enemy aircraft began to occur frequently after the Axis defeat in North Africa, with the Beaufighter – the Arado's arch enemy over the Bay of Biscay – again emerging as the main antagonist. Having served with the squadron since December 1941, 7R+AK was shot down in combat with Beaufighters 15 km (nine miles) northeast of Chania on 3 August 1943. The crew, Oberfeldwebel Karl Stienkemeier and Leutnant Wolfgang Zacharias, lost their lives when their Ar 196 crashed into the sea.

19

Ar 196A-4 BB+YB (Wk-Nr 0128) of 10. *Seenotstaffel*, Rovaniemi-Salmijärvi, Finland, 3 September 1943

The Wehrmacht's Lappland Army was deployed in the north of Finland, and a small number of Ar 196s were operated here by the so-called *Sumpfnotdienst* (swamp emergency service), attached to the *Seenotdienst* in Kirkenes, Norway, but operating mostly in Finland. Besides rescuing fighter pilots and German troops, they transported German agents in at least one case, on 3 September 1943, when Leutnant Josef Berendes flew two operatives from Rovaniemi to a lake 70 km (43 miles) behind the frontline. With the radio equipment removed, three men could be carried in the Ar 196's rear cockpit.

20

Ar 196A-3 6H+FM (Wk-Nr 0132) of 4./(*Bordflieger*)/FlErgGr (*See*), Kamp, Germany, autumn 1943

The Ar 196 operational training unit was renumbered from 3. to 4. *Staffel* of the seaplane operational training *Gruppe*

in February 1941, and moved to Kamp (now Rogowo in Poland) in May. From October 1944 it was known as the *Ergänzungs-Küsten-Nahaufklärungs und Bordflieger-Staffel* (Replacement Squadron for Coastal Short-range Reconnaissance and Embarked Aviation). The double seahorse badge shows the unit's affiliation with BoFlGr 196. 6H was its unit code and 6H+FM repeats its individual aircraft letter F on the tailfin. The first Ar 196A-3 built, this airframe initially served with the Travemünde test centre from November 1940. It was also involved in trials with the battleship *Tirpitz*. Assigned to the conversion unit in September 1943, the floatplane crashed off Kamp on 14 February 1944.

21

Ar 196A-3 D1+FH (Wk-Nr 0297) of 1./SAGr 126, Athens-Skaramagas, Greece, 27 January 1944

While subordinated for a while to KG 100, SAGr 126 adopted the bomber *Geschwader*'s attractive Viking ship badge. On 27 January 1944, near Mykonos, four Beaufighters of No 603 Sqn intercepted three Ju 52/3M See floatplanes escorted by three or four Ar 196s of 1./SAGr 126. All three Junkers transports and two Arados were shot down, while this aircraft, D1+FH, was slightly damaged. It landed near Delos. A total of 40 German personnel were killed in this one-sided battle, including the Arado crewmen Pfützner, Reichel, Zobel and Thürner. Beaufighter LZ144, flown by Flt Sgt Rooks and Flg Off Thom, ditched into the sea on the way to back to Gambut, in Libya, and is understood to have been damaged by the Arados.

22

Ar 196A-5 T3+LH (Wk-Nr 0506) of 1./BoFlGr 196, *Admiral Scheer*, Baltic Sea, 23 November 1944

A later incarnation of T3+LH than the *Tirpitz* aircraft depicted in Plate 17, this Ar 196A-5 was one of the last batch of Ar 196s built by Arado at Warnemünde. The floatplane was embarked on board *Admiral Scheer* when the ship steamed to the island of Ösel (Saaremaa) to give fire support to German troops on the Sworbe (Sõrve) peninsula. The shipborne scouts of the Kriegsmarine's surviving warships now flew in the classic artillery spotting role they had rarely fulfilled during the war, and T3+LH was shot down by three Soviet fighters off Sworbe on 23 November 1944 whilst performing this mission. Both the pilot, Oberfeldwebel Edward Zeissler, and the observer, Oberleutnant zur See Günther Telle, were killed.

23

Ar 196A-3 Akula 3/7096 (Wk-Nr 0219) of the Seaplane Yato, Burgas, Bulgaria, summer 1944

Bulgaria was the only German ally to put the Ar 196 into regular service with its armed forces, 12 A-3s being delivered in the spring of 1943 despite its government's refusal to join the war against the Soviet Union. The type received the name Akula (shark) and the type number 7096, marked with the individual aircraft number in a triangle on the tailfin. Applied farther aft than the German unit badges, the emblem of the Seaplane Yato (squadron) – a yellow water bird in wooden shoes toting a bomb – was no doubt inspired by the penguin of 3./SAGr 125. A photograph shows that the spiral on the propeller spinner, introduced by German units as a safety measure in the summer of 1944, was also implemented by the Bulgarians before the arrival of the Red Army in September.

24

Ar 196A-3 Akula 2/7096 (Wk-Nr unknown) of the Seaplane Yato, Burgas, Bulgaria, 1945

The wartime Bulgarian insignia, chosen to blend in with the Luftwaffe, was replaced with a roundel after Bulgaria declared war on Germany on 9 September 1944. The new markings included a horizontal tricolour band across the tailfin. This roundel was replaced in turn by a communist star shape in 1949. Transferred to the Bulgarian navy, the last Arados remained in service until 1956, although by then they were flying mainly in support of the nation's fishing fleet.

Two Ar 196s from SAGr 126 sit moored in the tranquillity of Kos harbour on 3 October 1943 shortly after the Dodencanese island had been taken by the Germans from the Italians (*Horizonten*)

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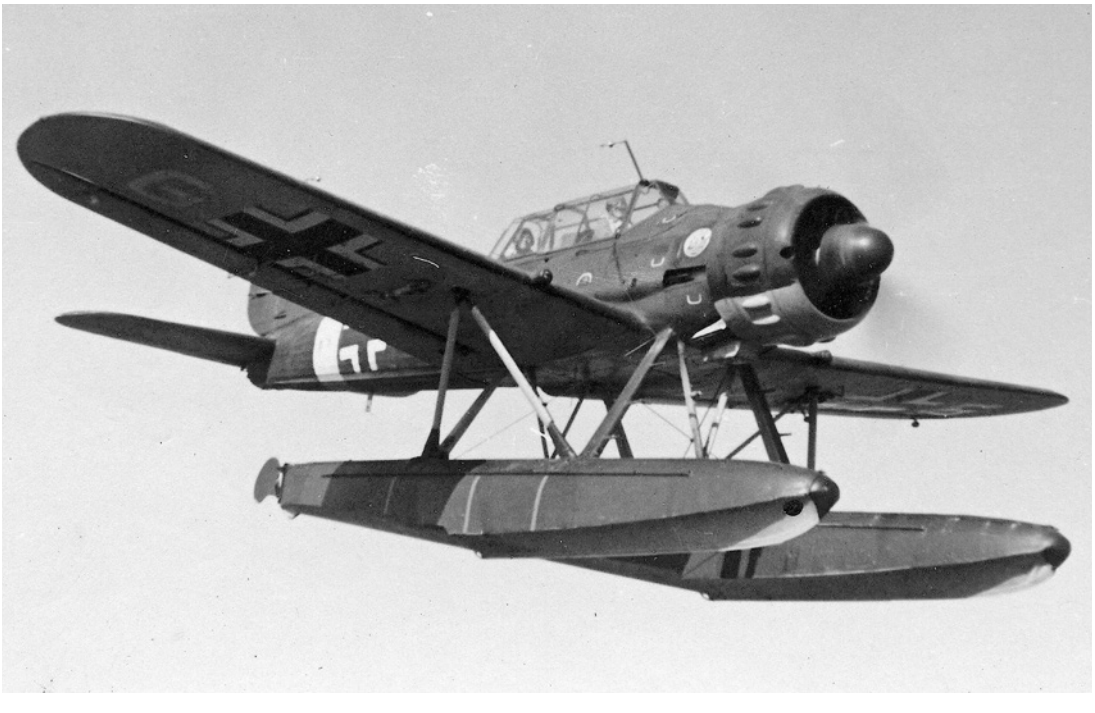
SAGr 126 became III./KG 100 only on paper for a while. The seaplane unit did adopt the bomber wing's Viking boat badge, however, seen here in the usual spot behind the cowling (*Horizonten*)



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Front Cover
On 15 August 1940 an Ar 196A-2 engaged in aerial combat over the Strait of Dover, the pilot of the floatplane, Hauptmann Gerrit Wiegmink, being the *Staffelkapitän* of the Luftwaffe's first embarked *Staffel*, 1./*Bordfliegergruppe* 196. It would operate the Ar 196 throughout World War 2, equipping not only Kriegsmarine warships but also coastal detachments sent to serve all over Europe. During the Battle of Britain, the unit found itself in a combat search and rescue role, and on 15 August, Wiegmink claimed the first aerial victory for the Ar 196 when his aircraft was jumped by six Spitfires of No 266 Sqn off Deal, Kent. Turning into his opponents, Wiegmink claimed one Spitfire damaged with his floatplane's 20 mm cannon.

In the ensuing dogfight, the Ar 196 was shot up and the observer/gunner, Leutnant zur See Dietrich Schlenker, was killed in the rear cockpit. Moments later, however, after turning tightly inside one of his opponents, Wiegmink caught the fighter flown by Sgt Frederick Hawley (Spitfire I N3189) and shot it down into the sea. Hawley perished in the crash. The Ar 196 also went down, although Wiegmink was rescued by a German R Boat (*Cover artwork by Mark Postlethwaite*)

Title Pages
An Ar 196A-2 is prepared for a catapult take-off from the heavy cruiser *Admiral Hipper* in Norwegian waters. This particular aircraft, T3+HK (Wk-Nr 0084), was one of the two Ar 196s embarked during the ship's cruise into the Barents Sea in late July 1940 (*Andrew Thomas collection*)